CONTENTS OF SUPPLEMENT.

PERSONAL 69
Obituary 69
ENGINEERING SOCIETIES 69
Coming Technical Meetings. 69
TRADE PUBLICATIONS 70
CONSTRUCTION NEWS: 70
Condensed List of Contracts Pending 70
Railways 71
Street and Electric Railways 71
Electric Light and Power 72
Bridges 72
Buildings 73
Water-Works 74
Irrigation 74
Sewerage 74
Garbage Disposal and Street Cleaning 74
Streets and Roads 74
Manufacturing Plants 75
Gas Plants 75
Miscellaneous Contracts 75
Contract Prices 75
Engineering Material Prices 76
INDUSTRIAL NOTES 76
PROPOSALS 76

PERSONAL.

Mr. H. H. Johnson has been appointed City Engineer of Portland, Ore.

Mr. George A. Carpenter has been elected City Engineer of Pawtucket, R. I.

Mr. A. L. McRae, consulting electrical engineer, St. Louis, Mo., has removed his offices from 307 Oriel Bldg. to 525 Lincoln Trust Bldg.

Mr. Benjamin F. Wood, an electrical engineer, with the Pennsylvania R. R., Altoona, Pa., was recently married to Miss Ethel A. Pruyn, of Syracuse, N. Y.

Mr. George B. Tennant, formerly with Post & McCord, New York, has been appointed Superintendent of the Structural Steel Department of the Cambria Steel Co., Johnstown, Pa.

Mr. George E. Gifford, M. Am. Soc. C. E., after an absence of a few months, has resumed his former connections with the King Bridge Co., and has again taken the management of the New York office, at 501 Fifth Ave.

Mr. Walter B. Snow, mechanical engineer, delivered a lecture on the "Influence of Mechanical Draft on the Ultimate Efficiency of Steam Boilers" before the students of the Rensselaer Polytechnic Institute at Troy, N. Y., Feb. 24.

Mr. C. A. Alderman has resigned his position as City Engineer of Eau Claire, Wis., to assume charge of the construction of the Dayton, Springfield & Urbana Electric Ry. His headquarters for the present will be at Springfield, O.

Mr. Arthur J. Cox, of the Iowa Engineerng Co., of Clinton, Ia., accompanied by two assistants, sailed from New Orleans for Cuba on Feb. 18. Mr. Cox will examine into several large engineering enterprises, and will be absent until about April 15.

Mr. I. M. Wolverton, Assoc. M. Am. Soc. C. E., has resigned his position as Chief Engineer of the New Columbus Bridge Co., Columbus, Ohio, and accepted the position of Chief Engineer of the Mount Vernon Bridge Works, in charge of the office and shops at Mount Vernon, O.

Mr. H. A. Parker, Second Vice-President of the Chicago, Rock Island & Pacific Ry. Co., of Chicago, has been appointed as General Manager of the road, to succeed Mr. W. H. Truesdale, whose appointment to be President of the Delaware, Lackawanna & Western R. R. was noted in our issue of Feb. 9.

Mr. Albert H. Porter, Niagara Falls, N. Y., has been appointed Assistant Superintendent of Public Works for the western division of canals in New York, to succeed Col. R. G. Lay. Mr. Porter is a civil and hydraulic engineer, and was at one time city engineer of Niagara Falls. At the time of this appointment he was connected with the Cataract Construction Co.

Mr. James D. Schuyler, Los Angeles, Cal., has been appointed by the U. S. Geological Survey as Consulting Engineer on the foundations, plans and general feasibility of the proposed dams at The Buttes, on the Gila River, near Florence, Ariz., and on Queen Creek, in the same vicinity. Mr. Arthur P. Davis is in charge of the explorations. Mr. Schuyler's office has been moved to 401 Douglas Block.

Mr. Stephen E. Babcock, for many years City Engineer of Little Falls, N. Y., resigned his position on Feb. 24. Mr. Babcock has been connected with many important hydraulic works and legal cases, and at present is Chief Engineer of extensions and improvements to the water-works of Amsterdam, N. Y., and also Chief Engineer of the Herkimer & Utica Electric R. R., 22 miles in length. The water-works and many other municipal enterprises at Little Falls have been developed with Mr. Babcock as engineer. Mr. John McComb, lately connected with the Deep Water Ways Surveys, has been appointed to succeed Mr. Babcock as City Engineer of Little Falls.

OBITUARY.

Mr. William Mark Bush, who was interested in railway construction in South America, died in New York city Feb. 19.

Mr. Frederick L. Geist, Treasurer of the Shiffler Bridge Co., of Pittsburg, died last week at Redlands, Cal., where he had gone to regain his health.

Mr. Horace E. McPherson, an engineer and contractor of Philadelphia, died in that city of typhoid pneumonia, Feb. 18, aged 36. He was a graduate of the Troy Polytechnic Institute, and, among other buildings, erected the dormitories of the University of Pennsylvania.

Herr. Edward Rotter, Central Inspector and Acting Director of the Kaiser Ferdinand Northern Ry. of Austria, died on Feb. 10, 1899, at the age of 57. Herr. Rotter was one of the most prominent engineers in Austria, and was one of the officers of the International Association for the Testing of Materials.

Mr. John Kruesi, M. Am. Soc. M. E., died at Schenectady, N. Y., Feb. 22, aged, 56. He was born in Switzerland and came to this country in 1870, entering the employ of Thomas A. Edison, at Menlo Park, N. J., under whose supervision he invented and perfected the underground tubing system now in general use. For some years Mr. Kruesi had been the chief mechanical engineer of the General Electric Co. at Schenectady.

Major-General Joseph J. Reynolds, U. S. A., retired, died at Washington, Feb. 25, at the age of 77. He was born at Flemingsburg, Ky., Jan. 4, 1822, and was graduated at the United States Military Academy in 1843. From 1846 to 1855 he was assistant professor of geography, history and ethics, and later professor of mechanics and engineering in Washington University, at St. Louis. He served in the Civil War, and continued in the army until his retirement in 1877.

Col. Amos C. Babcock, a well-known contractor of Chicago, died in that city Feb. 25. In connection with Senator Chas. B. Farwell and his brother, John V. Farwell, he built the Texas state capitol, costing about $6,000,000, for which they were given by the state of Texas 3,000,000 acres of land. In disposing of this land arose the famous Sturgis-Farwell litigation, which occupied different courts' attention for over 12 years. Colonel Babcock was born at Penn Yan, N. Y., in 1828.

Major Richard Calvin McCalla, of Tuscaloosa, Ala., died at that place Feb. 18, aged 73. He was born of Scotch-Irish parentage in Chester District, S. C., in 1826, and began his engineering career at the age of 21 as a rodman on the Charlotte & South Carolina R. R. surveys. From 1856 to 1859 he was principal assistant engineer of the Western North Carolina R. R., and at the outbreak of the Civil War became a major of engineers in the Confederate Army. After the war he was chief engineer of the Cincinnati, Cumberland Gap & Charleston, the Alabama & Chattanooga and other railways, and remained in active practice until October, 1887, when he received a permanent injury in a railway accident.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

CHICAGO ELECTRICAL ASSOCIATION.
March 3. Secy., J. R. Cravath, 825 Monadnock Block, Chicago, Ill.

BROOKLYN INSTITUTE OF ARTS AND SCIENCES.
March 3. Secy., Henry I. Weed, Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y.

TECHNICAL SOCIETY OF THE PACIFIC COAST.
March 3. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.

ENGINEERS' CLUB OF COLUMBUS.
March 4. Secy., H. M. Gates, 12½ North High St., Columbus, O.

ENGINEERS' CLUB OF PHILADELPHIA.
March 4. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

ENGINEERS' CLUB OF ST. LOUIS.
March 5. Secy., E. R. Fish, 2401 N. Spring Ave., St. Louis, Mo.

ENGINEERING SOCIETY OF WESTERN NEW YORK.
March 6. Secy., H. J. March, Library Bldg., Buffalo, N. Y.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
March 6. Secy., C. L. Annan, City Engineer's Office, St. Paul, Minn.

AMERICAN INSTITUTE OF ARCHITECTS (New York Chapter).
March 8. Secy., Chas. I. Berg, 10 West 23d St., New York city.

FRANKLIN INSTITUTE.
March 8. Some Features in the Structural Design of Buildings," Prof. Wm. H. Burr; March 9. Discussion, "Mechanical Applications of Compressed Air." Secy., Wm. H. Wahl, 15 South 7th St., Philadelphia, Pa.

BROOKLYN ENGINEERS' CLUB.
March 9. Secy., A. J. Provost, Jr., 191 Montague St., Brooklyn, N. Y.

ENGINEERING ASSOCIATION OF THE SOUTH.
March 9. Secy., H. M. Jones, 1000 Broad St., Nashville, Tenn.

CENTRAL RAILWAY CLUB.
March 10. Secy., H. D. Vought, 114 Fifth Ave., New York city.

ST. LOUIS RAILWAY CLUB.
March 10. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.

WISCONSIN STATE CHEMICAL ASSOCIATION.
March 10. Secy., I. Ladoff, 154 Knapp St., Milwaukee, Wis.

MONTANA SOCIETY OF ENGINEERS.
March 11. Helena, Mont. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.

THE LOUISIANA ENGINEERING SOCIETY.
March 13. Secy., J. F. Coleman, 712 Union St., New Orleans, La.

ENGINEERS' CLUB OF KANSAS CITY.
March 13. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.

DENVER SOCIETY OF CIVIL ENGINEERS.
March 14. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.

NORTHWEST RAILWAY CLUB.
March 14. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.

NEW ENGLAND RAILWAY CLUB.
March 14. Secy., Edw. L. Janes, P.O. Box 1158, Boston, Mass.

RAILWAY SIGNALING CLUB.
March 14. Secy., C. O. Tilton, C. M. & St. P. Ry., West Milwaukee, Wis.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
March 14. Secy., Wm. H. Searles, Case Library Bldg., Cleveland.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
March 15. Secy., C. W. Hunt, 220 West 57th St., New York city.

BOSTON SOCIETY OF CIVIL ENGINEERS.
March 15. Secy., S. E. Tinkham, City Hall, Boston, Mass.

WESTERN SOCIETY OF ENGINEERS.
March 15. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.

WESTERN FOUNDRYMEN'S ASSOCIATION.
March 15. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

NEW YORK RAILROAD CLUB.
March 16. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
March 16. Secy., H. C. McLeod, 112 Mansfield St., Montreal, Que.

ENGINEER'S CLUB OF CINCINNATI.
March 16. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
March 16. Secy., F. A. Charplot, P. O. Box 13, Savannah, Ga.

ROCHESTER ENGINEERING SOCIETY.
March 17. Secy., John F. Skinner, Reynolds Library Bldg., Rochester, N. Y.

THE DETROIT ENGINEERING SOCIETY.
March 17. Secy., Henry Goldmark, Wayne, Co. Savings Bank Bldg., Detroit, Mich.

NORTHWESTERN TRACK AND BRIDGE ASSOCIATION.
March 17. Secy., D. W. Meeker, St. Paul, Minn.

ENGINEERS' CLUB OF MINNEAPOLIS.
March 20. Secy., H. E. Smith, 1620 S. E. 14th St., Minneapolis, Minn.

TECHNICAL CLUB OF OMAHA.
March 20. Secy., J. Harry Lawrie, Omaha, Neb.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
March 20. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.

WESTERN RAILWAY CLUB.
March 21. Secy., F. M. Whyte, 225 Dearborn St., Chicago, Ill.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
March 21. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
March 29. Secy., Ralph W. Pope, 26 Cortlandt St., New York city.

WISCONSIN ENGINEERS' SOCIETY.
March 30. Annual meeting, Appleton, Wis., Secy., F. J. Harriman, Appleton, Wis.

FOUNDRYMEN'S ASSOCIATION (Philadelphia).
April 5. Secy., Howard Evans, Pier 45, N. Delaware Ave., Philadelphia, Pa.

ENGINEERS' CLUB OF COLUMBUS.—At the last meeting of this club, held on Feb. 18, Mr. W. Langdon Hayden delivered a lecture upon "Cast-Iron Graftings."

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.—A meeting of this club was held on Feb. 20. Mr. Charles Hermany read a paper on "The Proposed Nicaragua Canal."

ROCHESTER ENGINEERING SOCIETY.—The last regular meeting of this society was held on Feb. 17. Mr. Robert Cartwright presented an illustrated lecture, showing scenes in Great Britain and the Old World.

AMERICAN INSTITUTE OF MINING ENGINEERS.—The annual meeting of this association was held in New York city Feb 21-25, as announced in this column on Feb. 9. Elsewhere in this issue is given a full account of the meeting.

CANADIAN SOCIETY OF CIVIL ENGINEERS.—A regular meeting of this society was held at Montreal, on Feb. 16. Following the routine business a paper was read on "Pavements in Vancouver," by A. K. Stuart. The discussion of a paper on "Sand Filtration of Public Water Supplies," by R. S. Lea, was again postponed.

THE ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.—The last meeting of this society was held at Pittsburg, Pa., on Feb. 21. Dr. M. P. Hulst, of the Oliver Iron & Mining Co., read a paper entitled "Mining of Iron Ores," which was followed by a second paper on "Artificial Organic Dyestuffs," by Dr. E. S. Johnson.

MONTANA SOCIETY OF ENGINEERS.—A regular meeting of this society was held at Helena, Mont., on Feb. 11. The report of the committee on place of meetings was adopted, and in consequence special meetings of the society will be held in Butte on the second Saturday of March, and the second Saturday of every two months thereafter during the present year. The next meeting of the society will be held at Butte on March 11, in the Public Library of that city.

THE SCRANTON ENGINEERS' CLUB.—At the last meeting of this club Prof. Lewis M. Haupt delivered a lecture on "The Nicaragua Canal." As a member of the Nicaragua canal commission Prof. Haupt has obtained a very complete knowledge of the subject and this address was a review of the canal question from the historical and engineering standpoints. Maps and stereopticon views were shown to illustrate the details mentioned in the lecture.

WESTERN FOUNDRYMEN'S ASSOCIATION.—At the last regular meeting of this association, held at Chicago, Ill., on Feb. 15, the following topics were discussed: "What is your experience in regard to sand burning on castings so hard that it must be chipped off? What causes it and what can be done to prevent it?" "What has been your experience with the use of core compounds?" Both of these questions were discussed to a considerable extent, and it

was decided to have the secretary secure a paper on core compounds, to be presented at an early meeting of the association.

THE ENGINEERS' CLUB OF PHILADELPHIA.—A meeting of this club was held on Feb. 18, with 42 members and visitors present. The paper of the evening, entitled "A Sand Filter Plant," was presented by Mr. J. W. Ledoux. This was a description of a sand filter plant constructed for the Berwyn Water Co., at the Pickering Creek pumping station. The normal capacity is 1,500,000 gallons per day. The details of the construction and operation of this plant were described and the actual cost of construction was given in full.

L. F. Rondinella, Secy.

THE ENGINEERS' CLUB OF CHICAGO.—A meeting of this club was held on Feb. 21. The subject for discussion, "Are Underground Trolley Railways Practicable in Chicago," drew a large number of members and visitors. Mr. Edward B. Ellicott, city electrician, took the affirmative, claiming that there was no reason why, with proper care in installing, to insure good drainage, the underground system could not be employed in Chicago. New York and Washington were cited as examples, and a series of stereopticon views were exhibited to show the method of construction in these cities. Mr. J. R. Chapman, electrical engineer of the North Chicago Ry. Co., took the stand that the imperfect street drainage in Chicago would absolutely prevent the operation of any conduit electric system. The details of construction, such as insulation of wires and rails, the effect of leakage, currents, etc., were briefly considered.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—A notice to the effect that this society will hold an informal reunion at the Society House, 12 W. 31st St., on the evening of March 7, has been sent out. The circular says:

The object of this and future reunions, should this first one vote to continue them, will be to give frequent opportunity for the members of the society to meet and become acquainted with each other, and to exchange views upon professional subjects.

At the meeting of March 7 the subject will be presented by Messrs. Gardner C. Sims and W. S. Aldrich, who were assigned to the U. S. S. "Vulcan" during the war of 1898. Lantern slide views will be exhibited and after the paper a general impromptu discussion will be in order.

Before adjourning, the committee will more fully explain the hopes of its members, and will ask the meeting to take the opportunity to present its views on the advisability of the movement and to determine upon the best course to be pursued.

R. C. Ball, Percy Allan, A. L. Rice, F. E. Frothingham, F. R. Hutton, committee.

THE AMERICAN PAPER AND PULP ASSOCIATION.—The 22d annual meeting of this association was held on Feb. 15-16, at the Waldorf-Astoria Hotel, New York city. Owing to the blizzard of the early part of the week the attendance was smaller than usual. The program included the following papers: "Historical Sketch of Water Power Development in United States," J. T. Fanning, M. Am. Soc. C. E.; "Conservation of Water Power—Investigations by the National Government," F. H. Newell, U. S. Geological Survey; "United States Topographical Maps the Basis of the Development of Water Power," H. M. Wilson, U. S. Geological Survey; "Robert—The Father of Modern Paper Making," Colin K. Urquhart; "On the Application of the Principles of Forestry and Water Storage to the Mill Streams of New York State" (illustrated), George W. Rafter, C. E., M. Am. Soc. C. E.; "Industrial Betterment" (illustrated), Dr. Tolman; "National Organizations of the Paper Industry in Other Countries," J. R. MacNeille; "Water Power in New England," J. Herbert Shedd, M. Am. Soc. C. E.; "The Chemistry of Paper Making; Advances During the Last Ten Years," A. D. Little; "Education of Men for the Industrial Professions and Trades," Prof. Ira Nelson Hollis; "Conservation of Stream Flow as a Legitimate Field for Public Expenditure," Col. H. M. Chittenden, Chief Engineer 4th Army Corps U. S. V. and Captain Corps of Engineers U. S. A.; "Industrial Combination; Its Failures and Successes," Arthur T. Hadley; "The Value of Statistics," Carroll D. Wright, LL. D., United States Commissioner of Labor; "Conservation of Water Power Abroad," L. F. Vernon Harcourt, London, England; "The Paris Exposition," A. S. Capehart. The usual annual banquet was held the evening of Feb. 16. The officers elected for the ensuing year are as follows: Pres., P. C. Cheney; Vice-Presidents, W. M. Crane, M. M. Armstrong, F. H. Parks, C. A. Dean, G. W. Hammond, E. B. Denison; Secy. and Treas., C. W. Rantoul, Jr.

RAILWAY SIGNALING CLUB.—A meeting was held in Philadelphia, Pa., on Feb. 21, with a small attendance of members present. The President, Mr. W. H. Elliott, announced that owing to the failure of the last secretary to keep any records of the receipts and expenditures of the club, and in fact to render any satisfactory account of the work of his office, the club found its affairs in a very unsatisfactory condition. There was no money in the treasury and some small outstanding debt. He stated that owing to the promised success in securing advertisers the money could probably be secured with which to print the previous year's proceedings and papers of the club. The request was made by him in behalf of the managing officers of the club that the members signify their wishes regarding these officers' future action, and also take some action regarding its future operations.

The discussion which followed the President's remarks was extended, and resulted in the passage of a resolution that hereafter the Secretary and Treasurer (one person) should be required to give bonds for the faithful performance of his duties, and that all bills should be properly indorsed by the Executive Committee before payment, and in general that all receipts and expenditures should be approved by that body. A resolution that the by-laws of the club should be so changed as to provide for the holding of the annual meeting in November of each year was presented, and according to the constitution will be voted upon at the next meeting of the club. In response to the request of the president several members promised to present papers during the coming year. This closed the business proceedings of the meeting.

The first paper read was by Mr. E. D. Wilman, entitled "The Distant Signal," and was published nearly in full in our last issue. This was followed by a short paper entitled "Protection of Railway Crossings; Past, Present and Future," by Mr. C. S. Rhoads. The third paper was by Mr. W. D. Short, and was entitled "Inspection and Repairs to Automatic Block Signals."

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., and 9 x 12 ins.)

CONTRACTORS' TOOLS AND SUPPLIES.—Joseph G. Pollard, 141 Raymond St., Brooklyn, N. Y. Paper; 9¼ × 6 ins.; pp. 24.

This pamphlet illustrates, describes and gives the prices of tools and supplies used by contractors on railway and pipe-laying work, sewers, paving, etc. It covers a wide range of materials.

COAL AND COKE.—The Preston Coal & Coke Co., 209 Bets Building, Philadelphia, Pa. Paper; 6 × 5 ins.; pp. 22.

"In the Land of the Hills," as it is called, is very tasteful in its typography, paper and illustrations. The pamphlet describes in a general way the coal deposits of West Virginia, their development, and more particularly the coal properties of the company named.

PAINTS.—Harrison Bros. & Co., Inc., Philadelphia.

This is not a publication of ordinary form, but is a compactly folding celluloid 2-ft. pocket rule. It is graduated in 8ths, 16ths and 32d, and also in 10th, 20th and 40th of 1 in., and the matter relative to the company's product, which appears on the rule, in no way interferes with its usefulness. We understand that this rule is being sent free to such engineers as are interested in the manufactures of this company.

MACHINERY AND MACHINE TOOLS.—Brown & Sharpe Mfg. Co., Providence, R. I. Paper; 3¾ × 5¾ ins.; pp. 445.

This is the 1899 edition of the Brown & Sharpe catalogue containing illustrations and descriptions of their well-known machine tools and machinists' instruments, with such additions as the company has developed during the past year. As usual, a number of valuable tables on gears and gear cutting, decimal equivalents, wire gages, etc., are included, making the catalogue useful for reference.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Mar. 2.	School building,	New York, N. Y.	Feb. 23
Mar. 2.	Park work,	New York, N. Y.	Feb. 23
Mar. 2.	Boiler and repairs,	New York	Feb. 23
Mar. 2.	Electric lighting,	Sea Isle City, N. J.	Feb. 23
Mar. 3.	Roads (10),	Bedford, Ind.	Feb. 9
Mar. 3.	Steam piping, etc.,	Providence, R. I.	Mar. 2
Mar. 3.	Electric wiring,	Providence, R. I.	Mar. 2
Mar. 3.	Bridge draws,	Boston, Mass.	Mar. 2
Mar. 3.	Garbage disposal,	Fall River, Mass.	Mar. 2
Mar. 4.	Officers' quarters,	San Francisco, Cal.	Feb. 9
Mar. 4.	Quarrying stone, etc.,	Washington, D. C.	Feb. 9
	Advertised, Engineering News, Feb. 9.		
Mar. 4.	Brick paving,	Washington, D. C.	Feb. 2
	Advertised, Engineering News, Feb. 2.		
Mar. 4.	Bridge,	Villagrove, Ill.	Feb. 16
Mar. 6.	Sewers,	Woonsocket, R. I.	Feb. 2
	Advertised, Eng. News, Feb. 2 and 9		
Mar. 6.	Electric plant,	Fort Preble, Me.	Feb. 9
	Advertised, Eng. News, Feb. 9 to Mar. 2		
Mar. 6.	School building,	Eau Claire, Wis.	Feb. 9
Mar. 6.	Water-works,	Jamesburg, N. J.	Feb. 16
Mar. 6.	Court house,	Shepherdsville, Ky.	Feb. 23
Mar. 6.	Gas and electric lighting,	New Rochelle, N. Y.	Feb. 23
Mar. 6.	Electric franchise,	Elizabethtown, Ky.	Feb. 23
	Advertised, Engineering News, Feb. 23.		
Mar. 6.	Electric lighting,	Cambridge, O.	Feb. 9
Mar. 6.	School building,	New York, N. Y.	Feb. 23
Mar. 6.	Hospital building repairs,	New York, N. Y.	Feb. 23
Mar. 6.	Heating and ventilating,	Boston, Mass.	Mar. 2
Mar. 6.	School building,	Jacksonville, Ill.	Mar. 2
Mar. 6.	Sprinkling wagons, (25),	Salt Lake City,	Mar. 2
Mar. 6.	Bridge,	Fairfield, Cal.	Mar. 2
Mar. 6.	Water bonds,	Windsor, N. Y.	Mar. 2
Mar. 6.	Removing garbage,	Madison, Ind.	Mar. 2
Mar. 6.	Parkway,	Boston, Mass.	Mar. 2
Mar. 6.	Road work,	Brighton, N. Y.	Mar. 2
Mar. 7.	Bridges (4),	Urbana, Ill.	Mar. 2
Mar. 7.	Pratt truss bridges (2),	Virginia City, Mont.	Mar. 2
Mar. 7.	Sewer,	East Grand Forks, Minn.	Mar. 2
Mar. 7.	Macadamizing, etc.,	Brooklyn, N. Y.	Feb. 23
Mar. 7.	Electric lighting,	Centralia, Ill.	Feb. 23
	Advertised, Eng. News, Feb. 23 and Mar. 2.		
Mar. 7.	Sewers,	Niles, O.	Feb. 23
Mar. 7.	Orphans' home,	Northfield, Minn.	Feb. 23
Mar. 7.	Heating and ventilating,	Camden, N. J.	Feb. 16
	Advertised, Eng. News, Feb. 16 and 23.		
Mar. 7.	Brick paving, etc.,	Cleveland, O.	Feb. 16
Mar. 7.	Water-works,	Allison, Ia.	Feb. 16
Mar. 7.	Street cleaning,	Cleveland, O.	Feb. 9
Mar. 7.	Water pipe,	Everett, Mass.	Feb. 9
	Advertised, Engineering News, Feb. 9.		
Mar. 7.	Asphalt paving,	Joplin, Mo.	Feb. 9
Mar. 7.	Bridge,	Suisun City, Cal.	Feb. 23
Mar. 8.	Wharf,	Rock Point, Md.	Feb. 9
	Advertised, Eng. News, Feb. 9 to Mar. 2.		
Mar. 8.	Water bonds,	McConnellsville, O.	Feb. 9
Mar. 8.	Electric plant,	Halifax, N. S.	Feb. 16
	Advertised, Eng. News, Feb. 16 and 23.		
Mar. 8.	Underground crossing,	Williamsport, Pa.	Feb. 23
	Advertised, Engineering News, Feb. 23.		
Mar. 8.	Sewers,	Buffalo, N. Y.	Mar. 2
Mar. 8.	Paving material,	Buffalo, N. Y.	Mar. 2
Mar. 7.	Street work,	Jersey City, N. J.	Mar. 2
Mar. 8.	Brick paving (12 alleys),	Indianapolis, Ind.	Mar. 2
Mar. 9.	Paving with brick,	Easton, Pa.	Mar. 2
Mar. 9.	Hospital building work,	Binghamton, N. Y.	Mar. 2
Mar. 9.	Park work,	New York, N. Y.	Mar. 2
Mar. 9.	School building,	New York, N. Y.	Mar. 2
Mar. 9.	Museum buildings,	Philadelphia, Pa.	Mar. 2
Mar. 9.	Court house,	Roseburg, Ore.	Mar. 2
Mar. 9.	Iron bridges (2),	Gonzales, Tex.	Mar. 2
Mar. 9.	Brick paving,	Champaign, Ill.	Mar. 2
	Advertised, Engineering News, Mar. 2.		
Mar. 9.	Brick sewer,	Easton, Pa.	Mar. 2
Mar. 9.	Sewers,	Norfolk, Va.	Feb. 16
	Advertised, Eng. News, Feb. 16 to Mar. 2.		
Mar. 10.	Sewers,	Cleveland, O.	Feb. 16
Mar. 10.	Portland cement,	New York, N. Y.	Feb. 16
	Advertised, Eng. News, Feb. 16 to Mar. 2.		
Mar. 10.	Cement, iron beams, etc.,	Baltimore, Md.	Feb. 16
	Advertised, Eng. News, Feb. 16 to Mar. 2.		
Mar. 10.	Ornamental iron work,	New York	Feb. 16
	Advertised, Eng. News, Feb. 16 and 23.		
Mar. 10.	Bridge,	Cleveland, O.	Feb. 16
Mar. 10.	Heating and ventilating,	Cleveland, O.	Feb. 23
Mar. 10.	Railway,	Selma, N. C.	Feb. 23
Mar. 10.	Garbage disposal,	New York, N. Y.	Feb. 23
Mar. 10.	Paving,	Philadelphia, Pa.	Mar. 2
Mar. 10.	Fire engine house,	Passaic, N. J.	Mar. 2
Mar. 10.	Steel bridge over railroad,	Newport, R. I.	Mar. 2
Mar. 10.	Macadamizing (16 mls),	Brownstown, Ind.	Mar. 2
Mar. 10.	Street work,	St. Louis, Mo.	Mar. 2
Mar. 10.	Dredging and pier work,	New York	Mar. 2
Mar. 10.	Valves (10),	Minneapolis, Minn.	Mar. 2
Mar. 11.	Bridge,	Carrollton, Mo.	Mar. 2
Mar. 11.	Portland cement,	Washington, D.C.	Feb. 23
	Advertised, Engineering News, Feb. 23.		
Mar. 11.	Water pipe,	Washington, D.C.	Feb. 23
	Advertised, Engineering News, Feb. 23.		
Mar. 11.	School building,	Wheaton, Minn.	Feb. 16
Mar. 11.	Reservoir,	Washington, D. C.	Feb. 9
	Advertised, Engineering News, Feb. 9.		
Mar. 11.	Road work,	Woodbury, N. J.	Feb. 9
	Advertised, Eng. News, Feb. 9 and 16.		
Mar. 12.	Repairing reservoir,	Antelope, Ore.	Mar. 2
Mar. 13.	Hospital building work,	New York, N. Y.	Mar. 2
Mar. 13.	School building,	New York, N. Y.	Mar. 2
Mar. 13.	Sewers,	Toledo, O.	Mar. 2
Mar. 13.	Engineers' supplies,	New York, N. Y.	Mar. 2
Mar. 13.	Railway (50 miles),	Dublin, Ireland	Mar. 2
Mar. 13.	Brick paving and curbing,	Kokomo, Ind.	Feb. 23
Mar. 14.	Bridge (steel truss),	Macon, Ga.	Feb. 23
Mar. 14.	Plumbing,	Fort Hamilton, N. Y.	Feb. 16
	Advertised, Eng. News, Feb. 16 to Mar. 9		
Mar. 14.	Paving, etc.,	Cleveland, O.	Feb. 16
Mar. 14.	Life-saving station,	San Francisco, Cal.	Mar. 2
Mar. 14.	Sewers, Laurium,	Mich.	Mar. 2
	Advertised, Eng. News, Mar. 2 and 9.		
Mar. 14.	Road work,	Georgetown, O.	Mar. 2
Mar. 15.	Buoy maintenance,	Buffalo, N. Y.	Mar. 2
Mar. 15.	Asylum building,	Lancaster, Wis.	Mar. 2
Mar. 15.	Engines and dynamos,	Dundee, Scotland	Mar. 2
Mar. 15.	Steel highway bridge,	Le Roy, N. Y.	Mar. 2
Mar. 15.	Canal work,	Oakland, Cal.	Mar. 2
Mar. 15.	Light-house,	Baltimore, Md.	Feb. 16
	Advertised, Eng. News, Feb. 16 and 23.		
Mar. 15.	Metal work,	Baltimore, Md.	Feb. 16
	Advertised, Eng. News, Feb. 16 and 23.		
Mar. 15.	Exhibition buildings,	Glasgow, Scotland	Feb. 16
Mar. 15.	Main sewer,	Cleveland, O.	Feb. 16
	Advertised, Eng. News, Feb. 16 and 23.		
Mar. 15.	Water-works,	Fayetteville, Tenn.	Feb. 9
	Advertised, Eng. News, Feb. 9 and 16.		
Mar. 15.	Barracks, etc.,	San Francisco, Cal.	Feb. 9
Mar. 15.	Purchase of water-works,	Belem, Brazil	Dec. 1
Mar. 15.	Bridges (3),	Joliet, Ill.	Jan. 19
	Advertised, Engineering News, Jan. 19.		
Mar. 15.	Court house plans,	Wilkesbarre, Pa.	Jan. 26
Mar. 15.	Riprap rock,	Rock Island, Ill.	Feb. 23
	Advertised, Eng. News, Feb. 23 to Mar. 9.		
Mar. 18.	Street work,	Washington, D. C.	Mar. 2
Mar. 18.	Electric railway,	Pernambuco, Brazil	Mar. 2
Mar. 20.	Heating and ventilating,	Lima, O.	Mar. 2
Mar. 20.	Electric lighting,	San Diego, Cal.	Mar. 2
Mar. 20.	Building,	Iowa City, Ia.	Feb. 23
Mar. 20.	Repairing pump,	Cleveland, O.	Feb. 23
Mar. 21.	Pumping engines (3),	St. Louis, Mo.	Feb. 23
Mar. 21.	Bridge,	Bellefontaine, O.	Mar. 2
Mar. 21.	Gas lighting,	Binghamton, N. Y.	Mar. 2
	Advertised, Engineering News, Mar. 2.		
Mar. 22.	Court house,	Dallas, Ore.	Mar. 2
Mar. 23.	Mooring stones,	Portland, Me.	Mar. 2
Mar. 23.	Interior finish, etc.,	Kansas City, Mo.	Mar. 2
Mar. 23.	Water-works extension,	Bloomington, Ind.	Mar. 2
	Advertised, Engineering News, Mar. 2.		
Mar. 24.	Sewers,	Pontiac, Mich.	Mar. 2
	Advertised, Engineering News, Mar. 2.		
Mar. 27.	Asphalt paving,	Toledo, O.	Mar. 9
Mar. 27.	Court house,	Leesville, La.	Jan. 26
Mar. 28.	Docks,	Chicago, Ill.	Mar. 2
	Advertised, Eng. News, Mar. 2 to 23.		
Mar. 30.	Public building work,	San Francisco, Cal.	Mar. 2
	Advertised, Eng. News, Mar. 2 and 9.		
Mar. 31.	Garbage disposal,	Rochester, N. Y.	Mar. 2
Mar. 31.	Telephone concessions,	Shanghai, China	Nov. 24
	Advertised, Eng. News, Nov. 17 to Dec. 8.		
Apr. 1.	Viaduct substructure,	St. Joseph, Mo.	Jan. 5
Apr. 1.	Opera house,	Columbus, Ga.	Jan. 19
Apr. 3.	Pumps (2),	Winnipeg, Man.	Feb. 9
Apr. 3.	Market plans,	Toronto, Ont.	Mar. 2
Apr. 4.	Electric railway,	Madrid, Spain	Mar. 2
Apr. 6.	Dredging boat,	Sabine Pass, Tex.	Feb. 9
Apr. 10.	Bridges (2),	Chicago, Ill.	Feb. 23
	Advertised, Engineering News, Feb. 23.		
Apr. 10.	Ditch, piling and rip-rap,	Fremont, Neb.	Mar. 2
Apr. 10.	Arc lights,	Dayton, O.	Mar. 2
	Advertised, Eng. News, Mar. 2 and 9.		
Apr. 14.	Hall building,	Bradford, England	Jan. 19
Apr. 15.	Sewer material, etc.,	Honolulu, H. I.	Feb. 23
	Advertised, Eng. News, Feb. 23 and Mar. 2.		
June 1.	Plans for market,	Leeds, England	Feb. 16
June 30.	Electric r'y (23 miles),	Shanghai, China	Mar. 2
	Advertised, Eng. News, Nov. 17 to Dec. 8.		
No date.	Pontoon bridge,	Quincy, Ill.	Mar. 2
"	Railway (100 miles),	St. Louis, Mo.	Feb. 16
"	Cast-iron pipe,	Dursley, England	Mar. 2

RAILWAYS.

ALEXANDER & RICH MOUNTAIN.—We are informed that Dr. G. A. Newlon and H. C. Duncan, Jr., were appointed receivers of this company, Feb. 16. Operation has been suspended on the line for some time, but it is expected to start up again soon. The present route is from Alexander to Rich Mountain, W. Va., about 22 miles. H. Warden, Pres., Alexander.

BALTIMORE & OHIO SOUTHWESTERN.—It is announced that the receivers of this company having received permission of the U. S. Circuit Court to expend $3,489,641 for equipment, have made the following contracts: Pressed Steel Car Co., and Missouri Car & Foun-

dry Co., 2,560 box and coal cars, $1,357,500; Baldwin Locomotive Works, 45 passenger and freight engines, $502,500; Carnegie Steel Co., 40,000 tons steel rails, $754,200; American Continuous Rail-Joint Co., $90,900; Union Bridge Co., for nine bridges, $22,741; Ballast required for new rails, $211,800; second track at certain points and repairing of grades, $500,000.

BEAVER VALLEY.—Mitchell Vincent, Onawa, Ia., confirms the news item in our issue to the effect that he has the contract for grading the Soldier River line of this railway from Mondamin, where it leaves the Sioux City & Pacific R. R., to Ute, Ia., 31.6 miles.

CALIFORNIA.—Bids are asked by the supervisors of Ventura county until March 18, for the purchase of a franchise to construct and operate a line from the factory of the Pacific Beet Sugar Co. to the Pacific Ocean near Hueneme, according to the petition of Henry T. Oxnard. E. S. Kenaky, County Clk., Ventura, Cal.

CAPE FEAR & NORTHERN.—J. M. Bandy, Ch. Engr., Greensboro, N. C., informs us that 20 miles of this line have been graded between Apex and Williams, N. C., and track laid for 15 miles. As soon as weather permits, work of extension will begin. The length of completed road will probably be 150 miles. Gibson & Carpenter, Holly Springs, N. C., are the contractors. B. N. Duke, Pres., Durham, N. C.

CENTRAL NEW ENGLAND.—Ryan & Kelly, Philadelphia, Pa., have been awarded the contract for the construction of the proposed extension for this company, from Tariffville, Conn., north to Springfield, Mass., about 15 miles. Work is to be completed by July. The completion of this extension will enable competition in coal traffic with the New York, New Haven & Hartford R. R. Co. C. H. Ewing, Ch. Engr., Hartford, Conn. We are informed that Ryan & Kelly's street address is at 8 South Broad St., Philadelphia.

CHICAGO, BURLINGTON & QUINCY.—It is announced that the directors of this company, at a meeting at Boston, Feb. 23, decided to raise about $5,000,000 for improvement and equipment purposes, and to issue $16,000,000 in new bonds, with which to buy in the Chicago, Burlington & Northern Ry. and the Keokuk & Western. E. J. Blake, Ch. Engr., Chicago.

COLUMBIA VALLEY.—This company was incorporated in Washington, Feb. 16, with $3,000,000 capital stock, to construct a line from Wallula, Wash., on the south bank of the Columbia River, to a point near the mouth of the same river. The incorporators are: L. Gerlinger and George Canby, Vancouver, Wash.; George W. Stapleton, Portland, Ore.

COPPER RANGE.—Thomas Appleton, Ch.Engr., Houghton, Mich., informs us that location is in progress and is nearly completed for this proposed railway from Houghton southwest to Rockland, Mich., 45 miles. The maximum grade is 2%, and the maximum curve, 6°, with a curve of 14° on some switches. The capital for construction has been paid in, and bids will be received for construction work about April 1. Jas. A. Seager, Pres., Houghton. Wm. A. Paine, 27 State St., Boston, Mass., is interested.

CUMBERLAND VALLEY.—Press reports state this company will probably extend its line from Winchester southward via Lexington, Va. T. J. Brereton, Ch. Engr., Chambersburg, Pa.

EASTERN ILLINOIS & MISSOURI.—W. S. Dawley, Ch. Engr., 355 Dearborn st., Chicago, Ill., informs us that two surveying parties are now in the field selecting the route for the possible extension from Marion, Ill., south. This company has recently been incorporated by persons connected with the Chicago & Eastern Illinois R. R. Co.

INDIAN RUN.—This company was incorporated in Kentucky, Feb. 21, with $5,000 capital stock, to build a railway between Lewis and Greenup counties, Ky. The incorporators are: J. W. Riggs and J. L. Watkins.

IRELAND.—Bids are asked by the secretary to the Londonderry & Lough Swilly Ry. Co., care of commissioner of public works, Dublin, Ireland, until March 13, for constructing 49⅝ miles of railway from Letterkenny to Burton Point, County Donegal.

LOWELL & HASTINGS.—W. H. Clark, Gen. Mgr., Lowell, Mich., is stated to have purchased 50,000 ties, and to have placed an order with the Illinois steel works, of Chicago, for over 1,000 tons of rails to complete the extension of this line to Belding, Mich. Active operations are expected to begin in March. C. A. Gordon, Ch, Engr., Grand Rapids, Mich.

LOUISIANA, NORTH & SOUTH.—It is officially stated that definite arrangements have been made for constructing a portion of this line from Arcadia to a point near Alexandria, La., forming a section of the projected railway from Fort Smith, Ark., to New Orleans, La., 560 miles. The maximum grade is 1%. N. L. Wood, Ch. Engr., Wichita, Kan. A. L. Atkins, Vice-Pres., of St. Louis Construction Co., Arcadia, La., is interested.

MEXICO.—Press reports state that the Mexican government has decided to offer a large subsidy for the construction of a railway across the Sierra Madre range from Chuchupa, State of Chihuahua, to Huisopa, on the Sonora line. This line will save from four to five weeks in getting across the mountains. The Rio Grande, Sierra Madre & Pacific is to be extended from Casas Grandes to Chuchupa during the summer.

MISSOURI TERMINAL.—Incorporated in Missouri, with $75,000 capital stock, to operate a railway in St. Louis, Mo. The incorporators are: Valle Reyburn, Henry Vierling, L. E. Anderson, C. A. McMillan and others.

MONTEREY & FRESNO.—H. A. Greene, Gen. Mgr., Monterey, Cal., informs us that bonds have been sold for the completion of the first section of 48 miles to Hollister, Cal., and the contract let to the California Construction Co. Work has commenced on a 1,500-ft. wharf at Monterey. The route is from Monterey to Fresno, via Salinas, San Juan and Hollister, 150 miles. A. H. Jones, Pres.; Geo. H. Dodge, Ch. Engr., both of Monterey.

MORO BAY, WARREN & FORDYCE.—Incorporated in Arkansas, Feb. 21, with a capital stock of $450,000, to build from Moro Bay, on the Ouachita, Bradley county, to Fordyce, Ark., 45 miles. The incorporators are: J. N. Wheeler, R. M. Childs, W. R. Quinney and others.

NATCHEZ, URANIA & RUSTON.—C. W. Lacroix, Ch. Engr., Urania, La., informs us that the surveys have been made, part of the right of way obtained and the capital secured for this proposed line from Natchez to Ruston, via Jonesville, Urania and Vernon, Tex., 122 miles. The Urania Lumber Co., Ltd., began the work on Jan. 1 and will complete 10 miles in several months. Contracts for the balance of the line have not yet been awarded as the company is seeking to secure certain bonuses before letting final contracts. Henry E. Hardtner, Pres., Urania.

NEVADA-CALIFORNIA-OREGON.—Tracklaying is said to have commenced on the extension of this line from Amedee, north about 50 miles to Van Loan, Cal. About 3,000 tons of steel rails have been ordered in the East, and work is expected to take about four months. E. Gest, Mgr. and Ch. Engr., Reno, Nev.

ONTARIO.—W. H. Brouse, C. J. Campbell and others of Toronto, Ont., have petitioned for permission to build a railway from the Grand Trunk Line terminus at Haliburton to Mattawa, via Whitney.

OREGON RAILROAD & NAVIGATION.—Hale & Smith, 320 East Water St., Portland, Ore., inform us that they have the contract for building an extension to this railway from Dayton to Covello, Wash., 16 miles, work to be completed by May 1. Surveys have been made and the right of way secured. A. L. Mohler, Pres.; W. H. Kennedy, Ch. Engr., both of Portland.

PORT HURON, LEXINGTON & WESTERN.—Edgar Brennan, Vice-Pres. and Ch.Engr., 26 Schmidt Block, Toledo, O., informs us that most of the right of way has been secured for this proposed steam railway from Port Huron to Saginaw or Bay City, via Lexington, Sanilac Center and Caro, Mich., 100 miles. The first 20 miles from Port Huron to Lexington has been graded. Negotiations for capital to complete the construction are pending but not completed.

QUINCY BELT.—This company was incorporated in Illinois, with a capital stock of $5,000, Feb. 20, to construct a line to furnish terminal facilities for transportation companies entering Quincy, Ill. The incorporators are: Chauncey H. Sastle, Chas. H. Williamson, John S. Cruttenden, Lewis S. Boswell, Anton Binkert, and Dickerson McAfee, all of Quincy, Ill.

RICHMOND, OXFORD, REILY & CINCINNATI.—This company has been incorporated with a capital stock of $2,000 to build from Richmond, Ind., to Cincinnati, O. The incorporators are: H. H. Smith, S. E. Frye, C. A. Shera, and others.

TABOR & NORTHERN.—Press reports state that this railway, running from Tabor to Malcomb, 9 miles, has been sold to Robert McClelland Omaha, Neb., for $23,000. It is also said that about $10,000 will be spent toward improving the road,

WASHINGTON & SEABOARD.—We are informed that A. B. Linderman, said to be interested in this proposed line from Hyattsville, Md., to Point Lookout, is not connected with the Bethlehem Iron Co., South Bethlehem, Pa.; also that Robert P. Linderman, Pres. of Bethlehem Iron Co., is in no way interested in this project.

STREET AND ELECTRIC RAILWAYS.

LACONIA, N. H.—L. S. Pierce, Supt., Laconia, informs us that surveys have been made and the capital secured for an extension of the Laconia St. Ry., from Lakeport to The Weirs, five miles. Work will be done by the company. Poles and ties have been bought; cars and motors have been ordered. H. L. Pierce, Pres., Leominster, Mass.

NORTHAMPTON, MASS.—The state railway commissioners have granted a charter to the Northampton & Amherst St. Ry. Co., with a capital stock of $150,000. Among those interested are: F. S. Coolidge, Fitchburg, Mass.; E. F. Blodgett, Leominster, Mass.; W. H. Gates, Hadley.

WALTHAM, MASS.—The Waltham, Newton & Forest Hills St. Ry. Co. has been organized with a capital stock of $200,000, to build from Waltham to South and Washington Sts., Boston, via Newton, a distance of 13 miles. The directors are: Chas. F. Avery, Newtown, Mass.; Chas. H. Wilson, Brookline, Mass., and Wm. M. Butler, Boston.

WOBURN, MASS.—Chas. F. Woodward, Pres., of Reading & Lowell St. Ry. Co., Wakefield, Mass., informs us that this company contemplates building an extension from Woburn to Wilmington and Tewksbury, 7½ miles. Part of the locations has been granted and the remainder is expected to be obtained. Capital for construction has been secured, but no contracts awarded. J. A. Bancroft, Ch. Engr., Reading, Mass.

SHELTON, CONN.—Work is expected to begin soon on the extension of the Shelton St. Ry., from Shelton to Stratford, about nine miles. C. W. Blakeslee & Son, New Haven, Conn., have the contract for track work, grading, etc., and the Berlin Iron Bridge Co., East Berlin, Conn., the contract for the iron work. The work must be completed by June 1. Andrew Radel, Pres., Bridgeport, Conn.

BUFFALO, N. Y.—The Continental Construction Co., Boston, Mass., is reported to have contracted to construct the proposed Buffalo, Hamburg & Aurora Ry. from East Aurora to Hamburg, via Orchard Park, 21 miles. Some of the material is already on the ground, and work is expected to be completed by August 1. H. J. Bensing, Pres.; U. L. Upson, Gen. Mgr., 1090 Ellicott Square.——Press reports state that a syndicate of New York and Philadelphia capitalists, with $25,000,000 capital, has purchased the entire street railway system of Buffalo and five important suburban lines, including the Buffalo Ry. Co., the Buffalo Traction Co., the Buffalo & Niagara Falls Electric Ry., the Buffalo & Lockport Electric Ry., the Buffalo, Bellevue and Lancaster Ry., and the Niagara Falls Park & River Ry. In addition, it gains control of the upper steel bridge, owned by the Niagara Falls and Clifton Bridge Co., and the new suspension bridge which the Lewiston Connecting Bridge Co. and the Queenstown Heights Co. are now erecting over the river at Lewiston.

MINEOLA, N. Y.—The Mineola, Hempstead & Freeport Traction Co. was incorporated Feb. 27, with a capital of $125,000, to construct and operate a street railway 11 miles in length, by any motive power other than steam, from Mineola to Freeport, Nassau county.

NEWARK, N. Y.—Supervisor J. Dupha Reaves, W. H. H. Stebbins, Luther Finley and E. P. Soverhill, of Newark, will apply to the village trustees for a franchise to build an electric line on the principal streets of Newark, according to reports. Power will be obtained from the Ganargua River.

PEEKSKILL, N. Y.—Sanderson & Porter, New York, are reported to have been awarded the contract for the construction of the proposed trolley line of the Peekskill Traction Co. through Peekskill to Cortland and Yorktown, about 12 miles. Frank Frye, Pres.; Chas. N. Wells, Secy. and Treas., of Peekskill.

RAQUETTE LAKE, N. Y.—The Raquette Lake R. R. Co. has been organized, with $250,000 capital stock, according to reports, to construct an electric railway from Clearwater, on the Adirondack & St. Lawrence R. R., to Raquette Lake, about 19 miles. Among the directors are: J. Pierpont Morgan, Chauncey M. Depew, W. Seward Webb and Samuel Calloway.

HACKENSACK, N. J.—The purchasers of the Union Traction Co., organized Feb. 21 under the name of the Newark & Hackensack Traction Co., with the following officers: G. W. McCormick, Pres.; W. C. Giles, Vice-Pres.; John H. Coon, Treas., all of New York. The next meeting will be held March 1, when it is expected that plans will have been completed for the extension of the road to this place.

TRENTON, N. J.—The Trenton, Lawrenceville & Princeton R. R. Co. has been incorporated, with a capital stock of $200,000. The incorporators are: Henry C. Parry, James L. Branson and Wm. B. Parry, Langhorne, Pa.; Owen Moore, Jr., Wallace Buckman, Trenton, and others.

COLLINGDALE, PA.—The Philadelphia, Morton & Swarthmore St. Ry. Co. was incorporated, Feb. 24, with a capital stock of $150,000, to build a street line between Collingdale and Glenolden, 1½ miles. The incorporators are: J. Paxton Lance, Pres.; William G. Powell, S. Fowler, Henry A. Noble, of Philadelphia; Ashley R. White, Jr., Haddonfield, N. J.

WILKINSBURG, PA.—We are informed that the surveys have been made and the right of way obtained for the proposed Wilkinsburg & East Pittsburg St. Ry. from Wilkinsburg to East Pittsburg, via Swissvale, Edgewood, Copeland and North Braddock, seven miles. Contracts for rails and special work have been let to the Johnston Street Rail Co., and for bridges to the Pittsburg Bridge Works. The track-laying contract has not yet been awarded. W. L. Mellon; Wilkins & Davison, Engrs., Pittsburg, Pa.

ATLANTA, GA.—David E. Evans & Co., Baltimore, Md., are reported to have been awarded the contract for building 10½ miles of track and reconstructing 16½ miles in this city for the Atlanta St. Ry. Co. Other bidders were J. G. White & Co., Baltimore, and the Electric Installation Co., Chicago.

GREENVILLE, MISS.—This city has agreed to let the contract for lighting its streets for ten years to the Greenville Light & Car Co., upon the condition that the company construct an electric railway on the principal streets before Nov. 1. J. A. Gaboury, Pres., is said to have stated that a new system would be in operation by June 15.

ELYRIA, O.—The Lorain Co. Ry. Co. has been incorporated, with $100,000 capital stock, to build from Elyria to North Amherst. The incorporators are: Parks Foster, E. C. Foster, F. L. Fuldor, W. B. Thompson.

MARYSVILLE, O.—Wm. A. Wright, Pres. of Marysville, Richwood, Magnetic Springs & Delaware Electric Ry. Co., Magnetic Springs, O., informs us that most of the right of way has been secured for this proposed 30-mile line. No contracts have been let, but will be as soon as capital for construction has been finally secured.

FLINT, MICH.—We are informed that the council granted a franchise, Feb. 21, to A. A. Talmage, 220 Broadway, New York, and Chas. G. Moore, Olean, N. Y., to build and operate an electric line in this city, to be operated in connection with a line to Long Lake and Fenton. Construction is expected to begin as soon as frost is out of the ground. Surveys are now in progress.

LANSING, MICH.—L. C. Chase, Danville, Ill., informs us that surveys have been completed for the projected Lansing, Dexter & Ann Arbor Electric R. R. from Lansing to Ann Arbor, via Mason, Danville, Plainfield and Dexter, 60 miles. The preliminary contract has been let to Westinghouse, Church, Kerr & Co., who will obtain the capital, and construct and equip the road. C. A. Mapes, Pres., Lansing.

CHICAGO, ILL.—The Aurora & Chicago Ry. Co. and the Elgin & Chicago Ry. Co. have each been incorporated, with $300,000 capital stock, by B. Mahler, H. A. Everett and E. V. Moore, of Cleveland, O.; Elmer E. Barrett and Edward Dickinson, Chicago. It is proposed to build a number of such electric lines, with Chicago as the center.

ST. LOUIS, MO.—The Midland Terminal Ry. Co. was incorporated, Feb. 24, with a capital stock of $75,000, to build from Biddle St. to Cherokee St., to be about 7½ miles in length. The incorporators are: Valle Reyburn, J. P. Rodgers, L. E. Anderson, J. C. Kenny and others.

PERNAMBUCO, BRAZIL.—Bids are asked by the secretary of industry, Pernambuco, until March 18, for the construction of about three miles of electric railway between this city and Olinda.

MADRID, SPAIN.—Reports state that bids are asked by the office of public works until April 4 for constructing an electric railway in Madrid.

SHANGHAI, CHINA.—Bids are asked until June 30, postponed from March 15, for a concession for constructing about 23 miles of electric tramways in Shanghai. Plans may be obtained from Blackall & Baldwin, 39 Cortlandt St., New York, upon a deposit of $500. J. O. P. Bland, Secy., Shanghai.

ELECTRIC LIGHT AND POWER.

AUGUSTA, ME.—The Kennebec Light & Heat Co. has decided to build a new power station this year. Plans are now being prepared. Superintendent Williams may be addressed.

BOSTON, MASS.—Councilman Cotter is reported as again urging the construction of a plant for the city hall.

HOUSATONIC, MASS.—Estimates have been made for the proposed plant for the Housatonic Power Co. The dam will be 400 ft. long and 35 ft. high. It is proposed to furnish 20,000 HP.. The company has applied to the Connecticut legislature for an amendment to the charter. Geo. E. Terry, Waterbury, Conn., may be addressed.

MARLBORO, MASS.—Salem M. Hardy, Pittsfield, Mass., is reported as interested in a proposed plant for this city.

MEDWAY, MASS.—It is reported that the plant and rights of the Medway Electric Light Co., its town contract, franchise, etc., have been bought from John McGuinniss by H. G. Fairbanks, for the Medway & Medfield St. Ry. Co. It is the intention of the railway company to increase its power plant at Medfield, and from it to furnish electricity for street lighting here.

PROVIDENCE, R. I.—Bids are asked until noon, March 3, for the electric wiring of the new state house. Lewis & Claflin, Archs., Francis Bldg., 146 Washington St.; E. H. Glezen, Secy. Comrs.

FORT PLAIN, N. Y.—The Fort Plain Gas, Electric Light & Power Co. has purchased a new water power site on East Canada Creek, and will build a plant thereon at once and transmit the power to this place and Nelliston, a distance of nine miles.

MALONE, N. Y.—The new electric lighting company proposes to purchase a piece of land from Frank F. Amsden as a site for a new power house.

MASSENA, N. Y.—The Massena Electric Light Co. has been granted a franchise. It will furnish this place with 20 1,600-c. p. arc lights. The plant will be completed in about 50 days.

NEWARK, N. Y.—Abram Garlock, Supt. of New Light, Heat & Power Co., writes us that the plant will have a capacity for 100 1,200-c. p. arc and 2,000 15-c. p. incandescent lights; estimated cost, $35,000. Bids will be wanted soon.

PORT JERVIS, N. Y.—The new owners of the Port Jervis Light & Power Co. will begin the construction of its power house at once, according to reports. C. J. Van Inwegen, Receiver.

WAPPINGER'S FALLS, N. Y.—A proposition to put in a plant and water-works has been submitted to the board of trustees.

WILLIAMSTOWN, N. J.—The question of building a plant and water-works is being considered.

CHARLEROI, PA.—It is stated that the Monongahela Valley Electric Co. has let contracts for an increase of 800 HP. in its engine and steam plants at Speer, Pa. It has also contracted for an additional increase in its electrical equipment of two 3-000-light incandescent machines, and one 125-light arc machine. Charleroi, Belle Vernon, Fayette City, Coal Center and California will receive light from the company.

EASTON, PA.—The franchise and property of the Easton Power Co. of New Jersey, have been transferred to the Easton Power Co. of Pennsylvania. Capital stock, $200,000. A new plant will be built at once, according to local papers.

NORTH VERSAILLES, PA.—The North Versailles Light & Power Co. has purchased a site for a new plant, which it is proposed to have furnish power and light to Turtle Creek, Willmerding, Pitcairn and East McKeesport. E. W. Boyd, Pres.

WEST NEWTON, PA.—This place voted, Feb. 21, to issue $16,000 in bonds for enlarging the plant and for paving.

WASHINGTON, D.C.—Prof. S. P. Langley, Secy. Smithsonian Institute, has recommended the installation of an electric wiring system for lighting the institution buildings.

BALTIMORE, MD.—Local papers state that the plans of the consolidation of the property of the various electric companies calls for the construction of a central electric plant and the gradual abandonment of the other plants. Alex. Brown & Sons, bankers, Baltimore and Calvert Sts., are to finance the project.

WILLIAMSPORT, MD.—An election will be held March 6 to vote on the question of a municipal plant and waterworks, to cost $20,000. M. E. Cullen, Town Treas.

HAMPTON, VA.—Henry Brauns, Builders' Exchange Bldg., Baltimore, Md., is preparing plans for a power house with a capacity of 2,000 HP. for lighting, etc., for the Newport News & Old Point Ry. & Electric Co. Wm. J. Payne, Pres., Richmond, Va.; S. B. Thompson, Elec.Engr.

HARRISONBURG, VA.—C. F. Thomasson, Secy. Merchants' Light & Power Co., writes us that bids will be wanted within 90 days for constructing a plant to cost $6,000. Estimates will be wanted for furnishing two boilers and engines, 75 to 100 HP. each; a dynamo of 1,500 16-c. p. lights; overhead wire, etc. J. R. Greene, Pres.; H. L. Bushong, Vice-Pres. and Gen. Mgr.

PULASKI, VA.—John T. Loving, Mayor, writes us that the town expects to issue 25-year 5% bonds for a plant to cost $10,000. The plant will have a capacity for 50 2,000-c. p. arc and 500 16-c. p. incandescent lights.

WADESBORO, N. C.—The legislature has been asked to grant this place authority to issue $30,000 in bonds for a plant and water-works.

CARTERSVILLE, GA.—The question of building a plant is being considered, according to reports. W. H. Milner, Chn. Com.

FLORENCE, ALA.—Surveys for the proposed developing of power on Cypress Creek, near this city, are being made by D. L. Foster, Huntsville, Ala. F. M. Perry, Florence, is interested.

TUSKEGEE, ALA.—We are informed that the letting of the electric light plant was deferred for 30 days from Feb. 15, the bids received to be retained, and the contract to be awarded on the same. Alber & Byrne, Engr., Birmingham, Ala.

GREENVILLE, MISS.—The Greenville Light & Car Co. has been awarded a contract to light this city for ten years from Nov. 1. J. A. Gaboury, Pres.

HUNTINGDON, TENN.—W. E. Leach, Cy. Clk., writes us that the contract for constructing a plant here has been let to A. M. Searles, Fisher Bldg., Chicago, Ill. The work is to be completed by April 15.

SWEETWATER, TENN.—D. L. Smith, Mgr. Sweetwater Telephone & Improvement Co., writes us that this company has been granted a franchise for operating a plant here; it has also been awarded the contract for lighting the city. The plant will be operated by steam, and a new 80 to 100-HP. engine is wanted, an alternating current dynamo sufficient for 20 arc lights of 2,000-c. p., and 500 to 700 16-c. p. incandescents, boilers, overhead wires, etc. Quotations are solicited. The city may decide to use arc lights of 1,200-c. p. instead of 2,000-c. p. The Sweetwater Telephone & Improvement Co. owns and operates a telephane exchange here.

LEITCHFIELD, KY.—The council has granted a 20-year franchise to the Union Electric Co.,Schenectady, N.Y.

DAYTON, O.—Bids are asked until April 10 for furnishing 300 2,000-c. p. arc lights for five years, as stated in our advertising columns. J. L. Baker, Pres. Bd. City Affairs; J. E. Gimperling, Cy. Comptroller.

ST. PARIS, O.—A. C. Bolinger, Mayor, writes us that nothing has been done towards securing a plant further than to vote to issue bonds.

VAN WERT, O.—The Electric Light & Power Co., of this place, has amended its charter by changing the name to the Gas-Electric Light & Power Co., and a certificate to increase the capital stock from $50,000 to $100,000.

ALBANY, IND.—Jas. B. Nelson, Baldwin Block, Indianapolis, will have plans and specifications for a plant and water-works completed in about two weeks. The report that the contracts have been let is false.

INDIANAPOLIS, IND.—The Chenoweth Light & Power Co. has been granted a 20-year franchise for a plant in the southeastern part of the city.

CHICAGO, ILL.—Alderman Alling has introduced an ordinance calling for the preparation of plans for the proposed subways for electric wires, pipes, etc., in the downtown district. L. E. McGann, Comr. Pub. Wks.

SENECA, ILL.—We are informed that this city voted recently against issuing bonds for a plant. Jas. J. Farrell, Pres.

ELROY, WIS.—The Fort Wayne Electric Corporation, Fort Wayne, Ind., has submitted a proposition to put in a light plant to cost $10,000.

DAVENPORT, IA.—The question of developing the water power in the city is being considered.

FONDA, IA.—R. F. Beswick, Chn. Com., writes us that bids will be wanted in March for furnishing and installing a plant to cost about $6,000.

VALLEY JUNCTION, IA.—An election will be held March 27 to vote on the question of granting a franchise for a plant and water-works.

OSAKIS, MINN.—The council is reported to have granted a 15-year franchise.

ABERDEEN, S. DAK.—The council has purchased the plant of Aberdeen Light & Power Co. for $3,500 cash, and the assumption of the bonded indebtedness of $35,000.

LIVINGSTON, MONT.—Press reports state that arrangements are being made by the Northern Pacific Ry. to put in an electric light plant for lighting the shops and other property. About 200 lights will be used in and about the buildings, and the plant may be constructed with a view to additional lighting capacity.

FULTON, MO.—This place has voted to issue $10,000 in 5% 20-year bonds for a plant.

FORT POINT, TEX.—We are informed that Young & Cohen, Galveston, Tex., submitted the only bid Feb. 16 to Capt. C. S. Riche, U. S. Engr., Galveston, Tex., for installing a plant at $5,515 for an electric light installation at the gun battery, and at $3,733 for an installation at the mortar battery.

PORTLAND, ORE.—W. Stuart Smith has submitted a report on a municipal plant to cost about $174,425.

OAKLAND, CAL.—The Equitable Gas Light Co. of San Francisco proposes to construct an electric plant after the erection of its new gas plant is completed.

SAN BERNARDINO, CAL.—Press reports state that construction on the proposed plant on Mill Creek will soon be begun. It will furnish power and light in the San Jacinto Valley. G. C. Baldwin, Ontario, Cal., is interested.

SAN DIEGO, CAL.—Bids are asked until March 20 for lighting the streets, public property, etc., with 57 2,000-c. p. arc lights for one year from April 1. W. J. Davis, Chn. Comrs. Pub Wks.

SAN FRANCISCO, CAL.—The mayor's clerk writes us that A. M. Hunt, 331 Pine St., has been employed to submit plans and estimates for a municipal plant.

GLOBE, ARIZ.—Alonzo Bailey, Los Angeles, Cal., is reported as interested in a scheme to develop the power on Upper Salt River, at this place.

LONDON, ENGLAND.—Press reports state that J. Pierpont Morgan, the banker, Broad and Wall Sts., New York, has promised to contribute about $25,000 to the cost of establishing an electric illuminating system in St. Paul Cathedral.

DUNDEE, SCOTLAND.—Bids are asked by the town clerk until March 15 for furnishing two 450-HP. steam engines and dynamos, a 700-HP. steam engine and dynamo; deposits of £1 1s. is required for plans and specifications. Walter H. Tittensor, Elec. Engr., Dundee.

NEW COMPANIES.—Union Electric Co., Cazenovia, N. Y.; $25,000; John O'Connell, of Cazenovia; David O'Connell, Marathon, N. Y.

Natchez Light, Power & Transit Co., Natchez, Miss.; $250,000; to furnish light, power and heat and to operate an electric railway; Maurice Moses, Abram Moses.

Citizen Electric Light Mfg. Co., Nunda, Ill.; $10,000; Marcellus L Josiyn, E. E. McCullom, E. G. McCullom.

Diamond Light & Heating Co., Montreal, Que.; $200,000; Henry J. Johnston, Richard C. Miller, Wm. J. McGee.

Lackawanna Valley Electric Light & Power Co., Carbondale, Pa.; has secured control of the plant of the Carbondale Electric Light, Heat & Power Co.; Wm. D. Boyer, Scranton, Pa.; T. L. Newell, Wilkesbarre, Pa.

Colorado Springs Light & Power Co., Colorado Springs, Colo.; $300,000; Wm. P. Bonbright, Geo. R. Buckman.

Winthrop Gas & Electric Co., Winthrop, Mass.; $100,000; S. J. Donovan, Pres.

Callender Power Co., Stockbridge, Mass.; $5,000; C. E. Callender, Pres.

Burgess Heat, Light & Power Co., 28 Water St., New York, N. Y.; $1,000,000, with $5,000 paid in; to manufacture and deal in machines and apparatus for generating artificial gas, and to acquire the patents and patent rights owned or controlled by Edward C. Burgess; Edward C. Burgess, John D. W. Ashton, Manhattan Borough, N. Y.; Wm. N. Wolfe, Jas. C. Jewett, Brooklyn, N. Y.

Cambridge Electric Energy Co., Cambridge, O.; $25,000; to manufacture and sell steam and electric light, heat and power; Nathan H. Barber, John C. Beckett, H. A. Patterson, H. O. Barber, Wm. C. Benbow.

Humboldt Electric Light & Power Co., Humboldt, Ia.; $10,000; Ira L. Welch, W. W. Sterns, T. G. White.

Norfolk New Light Co.,Norfolk, Va.; to buy and operate lighting and heating plants; W. H. Davis, Sr., E. M. Henry, W. H. Davis, Jr., A. Weck, M. S. Winston.

Dublin Electric Light Co., Dublin, N. H.; $5,000.

New Light, Heat & Power Co., Newark, N. Y.; $25,000; Daniel P. Smith, Frank Garlock, Abram Garlock.

Merchants' Light & Power Co., Harrisonburg, Va.; $10,000; to supply steam and to manufacture and distribute electricity in Rockingham county; J. R. Green, H. L. Bushong, C. F. Thomason, E. B. Coates, I. S. McNeill.

Bourbon Water & Light Co., Bourbon, Ind.; $11,000; to operate water-works and electric light plants; C. M. Leekman, John C. Dales, C. C. Layton.

Canyon Creek Electric Light Co., Burk, Idaho; $15,000; Wm. R. Miller, John Franks, F. R. Culbertson.

Chenowith Light & Power Co., Indianapolis, Ind.; $40,000; to furnish light, heat and power; Van A. Chenowith, David D. Smith, Anthony H. Hannon.

East Coast Power & Irrigation Co., Miami, Fla.; $1,000,000; to furnish electric power and also to use water for irrigation from Cape Sable, Monroe county, to Jacksonville; P. H. Loud, Edwin Nelson, Miami; J. C. Losee, New York.

Nova Scotia Electric Light Co., Anapolis, N. S.; $400,000; to build a power plant on the Gaspereau River; Dr. F. W. Borden, Minister of Militia, Ottawa, Ont.; Dr. Allen Haley, M.P., Windsor, N. S.; J. W. Beckwith, Bridgetown.

Miller Electrical Co., Pittsburg, Pa.; $100,000, with $1,000 paid in; to maintain and carry on a general electrical business; J. J. Miller, Charles Schmank, W. C. Thomas, Pittsburg; William Bader, James B. Baird, Allegheny, Pa.

Parks-Dimmock Light, Heat & Power Co., Omaha, Neb.; $2,000; Geo. Parks, Edwin S. Dimmock.

BRIDGES.

BOSTON, MASS.—Bids are asked until 12 m., March 3, for constructing two retractile draws for the bridge on Summer St. extension over Fort Point channel. William Jackson, Cy. Engr.——The following bids were received Feb. 20 for two masonry abutments of a bridge over the railway on Swett St: Norcross Bros., $20,400; Bell & Co., $17,750; Cyrus Barton, $18,900; D. F. O'Connell, $18,800; Thomas A. Rowe, $20,263; Collins & Ham, $19,557; R. D. Shanahan, $18,500; Foley & Ryan, $20,500; W. H. Keyes & Co., $19,840; Miller & Ellis, $20,699; Ross & Fowler, $18,940; F. H. Connolly, $18,951; Holbrook, Cabot & Daly (accepted), $16,985; Woodbury & Leighton, $20,950.

NEWPORT, R. I.—Bids are asked until March 10 for constructing a steel bridge over the railroad at Van Zandt Ave.; appropriation, $21,000. Wm. Hamilton, Comr. Pub. Wks.; J. E. Judson, Engr., Pawtucket, R. I.

ALBANY, N. Y.—A petition will be presented to the New York Central & Hudson River R. R. Co. to construct a roadway on the proposed new Maiden Lane bridge between Albany and Rensselaer.

GENESEO, N. Y.—It is reported that the Erie R. R. Co. will construct a new iron bridge over Canaseraga Creek, between Geneseo and Mount Morris.

LE ROY, N. Y.—Bids are asked by the Buffalo, Rochester & Pittsburg Ry. Co. until March 15 for constructing a steel highway bridge, 100 ft. long and 20 ft. wide, at Haskins' Cut; masonry abutments containing about 620 cu. yds., and 7,000 cu. yds. of grading, etc., of the approaches. W. B. Hoyt, Ch. Engr., Rochester.

MONTEZUMA, N. Y.—The state will construct two iron bridges over the Seneca River near this place, according to reports.

NEW YORK, N. Y.—The New Jersey Steel & Iron Co., Trenton, N. J., has been awarded a contract, at $1,290,290, for the steel towers and end spans of the new East River bridge, instead of the Pennsylvania Steel Co., at $1,209,444, as stated last week.

BUTLER, PA.—The Pittsburg & Western R. R. Co. has awarded a contract to the Riter-Conley Mfg. Co., 30 Water St., Pittsburg, Pa., at $40,000, for the construction of nine plate girder bridges of 80-ft. span, each, near this place.

ATHENS, GA.—The council proposes to construct a bridge over the Oconee River. J. W. Barrett, Cy. Engr.

BAINBRIDGE, GA.—A bill has been enacted by Congress to authorize the Georgia Pine Ry. Co. to construct a bridge over the Flint River in Decatur county. J. P. Williams, Pres., Savannah; Arthur Pew, Ch. Engr., Damascus, Ga.

SHREVEPORT, LA.—We are informed that the bridge for which bids are asked until March 9, stated in our issue of Feb. 9, is a wooden structure, to cost $30.

BILOXI, MISS.—The council has decided to issue $15,000 of bonds to construct a bridge across Back Bay.

SOMERSET, KY.—We are informed that the county court will ask bids about March 15 for constructing three iron or steel highway bridges. The court contemplates the erection of a fourth bridge in the near future, for which bids will be asked. William M. Catron, Judge.

BELLEFONTAINE, O.—Bids are asked until March 21 for the superstructure of the Kiblinger bridge. C. D. Campbell, County Audr.

JACKSON, MICH.—H. M. Taylor, Mayor, informs us that $20,000 of bonds have been issued for bridges. The city is doing the work.

ROCKFORD, ILL.—Edwin Main, Cy. Engr., informs us that the following bids were received Feb. 20 for constructing a plate girder bridge over Keith Creek, as advertised in Engineering News. All bids have been rejected and a contract has been awarded to the Massillon Bridge Co., Massillon, O., at $1,200, for a 44-ft. span:

	36-ft. span.	50-ft. span.
New Jersey Steel & Iron Co., Trenton, N. J.	$1,450	$1,870
Massillon Bridge Co., Massillon, O.	940	1,200
Clinton Bridge & Iron Wks., Clinton, Ia.	1,060	1,488
C. L. Strobel, 1744 Monadnock Bk., Chicago.	1,062	2,066
Chicago Bridge & Iron Wks., Chicago, Ill.	1,115	1,540
Penn Bridge Co., Beaver Falls, Pa.	1,200	1,820
Wabash Bridge & Iron Wks., Wabash, Ind.	1,330	2,087
Wisconsin Br. & Iron Co., Milwaukee, Wis.	1,155	1,716
J. G. Wagner Co., Milwaukee, Wis.	1,600	2,000
Indiana Bridge Co., Muncie, Ind.	1,173	1,668

QUINCY, ILL.—Bids are asked by John A. Steinbach, Mayor, for constructing a pontoon bridge about 300 ft. long over the bay.

URBANA, ILL.—Bids are asked by the county commissioners at the court house, until 10 a. m., March 7, for constructing four highway bridges on masonry. Ira O. Baker, Engr., 702 West University Ave., Champaign, Ill.

CLIMAX, MINN.—S. Jaxdahl informs us that bids were asked until Feb. 25 for the superstructure of a wooden bridge, to cost $1,000. The pile substructure will cost $1,000.

DULUTH, MINN.—The Duluth, Missabe & Northern Ry. Co. has awarded a contract to the American Steel Barge Co., West Superior, Wis., for constructing several steel bridges, according to reports.

VIRGINIA CITY, MONT.—Bids are asked until March 7 for constructing a Pratt truss bridge of two spans of 120 ft. each, and for a Pratt truss bridge of three 95-ft. spans, according to reports. H. E. Steffens, Clk. County Comr.

CARROLLTON, MO.—Bids are asked until March 11 for a wooden and iron bridge, according to reports. Chas. Finch, Comr.

KANSAS CITY, MO.—The Kansas City, Lawrence & Topeka Electric Ry. & Power Co. has applied to the state legislature for authority to construct a bridge over the Kaw River near Osage Ave. Edward E. Holmes, James Haggart and A. N. Gossett, Kansas City, and others, are interested.——A resolution is before the board of public works to require the Brooklyn Ave. St. Ry. Co. to change the grade of the viaduct over Agnes Ave. on Lexington Ave.

ST. LOUIS, MO.—The city has demanded $150,000 of the Terminal R. R. Association to construct a bridge over the sheds connecting Clark Ave.

GONZALES, TEX.—Bids are asked until March 9 for constructing two iron bridges, one over Sandies Creek and one over Peach Creek. W. W. Glass, County Judge.

ALEXANDRIA, S. DAK.—The county commissioners have awarded a contract to George C. Wise & Co., Council Bluffs, Ia., at $2,400, for constructing a steel bridge over the James River.

YANKTON, S. DAK.—A bill has been enacted by the house of representatives authorizing the Dakota Southern R. R. Co. to construct a bridge over the Missouri River.

DENVER, COLO.—Bids will soon be asked by the county commissioners for constructing a bridge over the Platte River, to cost about $2,000.

NEW WHATCOM WASH.—B. W. Huntoon, County Surveyor, writes us that the north 160-ft. combination span of the county bridge across the Nooksack River, Whatcom county, which has been recently wrecked by the washing out of the pile pier, is to be replaced immediately by Savage & Scofield, of Olympia, Wash. They will use old iron work, and the total cost, including rock rip-rap, will be $3,500.——About April 1, date not yet set, bids will be received by the county commissioners for the construction of a 120-ft. through fixed combination span across the south fork of the Nooksack River.

SEATTLE, WASH.—A contract was awarded Feb. 21 to the San Francisco Bridge Co. for a new county bridge over Cedar River, to cost $1,920 if pile piers are used, and $2,230 for rock piers.

FAIRFIELD, CAL.—Bids are asked until March 6 for constructing a combination bridge over Pleasant Valley Creek. G. G. Halliday, County Clk.

STOCKTON, CAL.—The San Francisco & San Joaquin Valley Ry. Co. awarded a contract, Feb. 14, to the Phoenix Bridge Co., Phoenixville, Pa., for constructing a viaduct over Alhambra Valley, to cost from $90,000 to $100,000, according to reports.

BUILDINGS.

BOSTON, MASS.—Bids are asked by the school committee of Boston, until March 6, for the installation of a heating and ventilating apparatus in the East Boston high school building; bond, $6,000. Ed. I. Aldrich, Chn., J. L. Faxon, Arch., 7 Exchange Place.

HOLYOKE, MASS.—**A fire in this city Feb. 28 destroyed the Windsor Hotel Block and several adjacent stores, causing a reported loss of $250,000.**

PROVIDENCE, R. I.—Bids are asked until March 3 for the necessary steam piping and electric wiring at the new state house. E. H. Glezen, Secy. of Bd.

BINGHAMTON, N. Y.—Bids are asked until March 9 for additions, alterations and repairs to the north building of the Binghamton State Hospital. John B. Stanbrough, Pres. Bd. of Mgrs.

LESTERSHIRE, N. Y.—Sullivan & Badgley, Binghamton, N. Y., were awarded the contract, Feb. 21, for erecting the new municipal building and fire station in Lestershire, at $16,478. The other bidders were Mitchell & Stever and Perry & Cook, both of Binghamton, and John Schulte and G. M. Horton, of Lestershire. M. S. Squires, Village Pres.

NEW YORK, N. Y.—Bids are asked by the board of education, at 585 Broadway, until March 9, for erecting a new building on 103d and 104th Sts., between 5th and Madison Aves., for Public School 171; also, until March 6, for sanitary work at Public School 108, Borough of Manhattan.——Plans have been completed, according to reports, for a new club house for the Army and Navy Club, now at 16 West 31st St., to cost about $100,000. Gen. J. Fred. Pierson, Pres.; Wm. A. Cable, Arch.——Plans have been filed by A. J. Kerwin, Jr., 593 Boulevard, for 6 and 7-story brick flat and store buildings, at Amsterdam Ave. and 70th St., to cost $275,000. S. B. Ogden & Co., Archs., 954 Lexington Ave.; by Jacob Kassewitz, 45 Ave. A, for three 6-story brick flat and store buildings at 71 to 75 East 3d st., to cost $85,500. G. F. Pelham, Arch., 503 5th Ave.; by J. S. Heisler, for ten 3-story brick dwellings on 142d St., near the Boulevard, to cost $75,000. Henry Fouchaux, Arch., 11th Ave. and 162d St.; by Wm. Van W. Graham, 1238 Madison Ave., for seven 5-story brick dwellings on 105th St., near Riverside Drive, to cost $210,000. Thomas Graham, Arch.; by Morris Mandelstein, 355 Pleasant Ave., for thirteen 5-story brick flat and store buildings at 100th St. and Park Ave., to cost $237,000. Thomas Graham, Arch., 1236 Madison Ave.; by Geo. T. Arnoux, 15 Cortlandt St., for a 6-story brick flat building on 113th St., near 7th Ave., to cost $75,000. C. Steinmetz, Arch., 60 Liberty St.; by Geo. A. McDonald, 51 East 117th St., for two 4-story brick flat buildings at Elton Ave. and 160th St., to cost $76,000. Edward Wenz, Arch., 1491 3d Ave.; by J. Bartscherer, 178 Evergreen Ave., for six 6-story brick flat buildings at the Boulevard and 148th St., to cost $325,000. Buchman & Deisler, Archs., 11 East 59th St.; by George Hofmann, 53 West 24th St., for three 6-story brick flat buildings at 319 to 325 East 8th St., to cost $101,000. Schneider & Herter, Archs., 48 Bible House; by James Curlew, 17 West 122d St., for three 5-story brick dwellings on 76th St., near Central Park West, to cost $120,000. Cleverdon & Putzel, Archs., 41 Union Square; by John C. Umberfield, 3 West 75th St., for four 4-story brick dwellings on 105th St., near West End Ave., to cost $100,000. Janes & Leo., Archs., 705 Boulevard.——Reports state that the following bids were received by the board of education, Feb. 21, for erecting a new building for Public School 170: H. Proost, 1180 Broadway, $322,600; H. M. Weed & Co., 97th St. and Boulevard (accepted), $294,700; J. J. Loonie, 287 4th Ave., $296,856; John H. Parker Co., 256 Broadway, $309,995; Murphy Bros., 407 East 101st St., $304,984; Luke A. Burke, 401 West 59th St., $306,000; Thos Cockerill & Son, 550 West 51st St., $324,392; P. Gallagher, 150 5th Ave., $311,975; John J. Hopper, 217 West 125th St., $312,000; Collier-Weeks Co., 165 West 23d St., $312,687; P. S. Brennan, 1748 Washington Ave., $298,650; Mapes-Reeve Construction Co., 150 Nassau St., $312,915.

NEW YORK, N. Y.—Bids are asked by the department of public charities, foot of East 26th St., until March 13, for the mason, iron, carpenter, roofing, painting and electric work, hand elevator, plumbing, water supply, gas fitting, heating, steam-fitting alterations and repairs necessary to the insane pavilion at Bellevue Hospital, 26th St. and 1st Ave.——Bids are asked by the board of education until March 13 for erecting a new building for Public School 172, on 108th and 109th Sts., between 1st and 2d Aves.——The House of Representatives has passed a bill providing for the erection of a new custom house on Bowling Green.

NEWARK, N. J.—The council building committee has accepted the bid of the King, Schoerer Co., New York, for a sterilizing plant for the City Hospital, at $3,397. The other bidder was the Bramhall, Dean Co., New York, at $2,587.

PASSAIC, N. J.—Bids are asked until March 10 for erecting a fire engine house at Bloomfield Ave. and Linden St. E. W. Gardner, Chn. Com.

PHILADELPHIA, PA.—Bids are asked until March 9, according to reports, for the erection of the main buildings of the Philadelphia Museum. Address Wilson Bros. & Co., Archs., 1036 Drexel Bldg.——Alfred C. Harrison, C. Hartman Kuhn and others are said to contemplate the erection of a new academy of music, to cost about $1,000,000.

SCHUYLKILL HAVEN, PA.—Armstrong & Printzenhoff, Land Title Bldg., Philadelphia, are reported to have received the contract for the construction of large car shops at this place for the Philadelphia & Reading R. R. Co.

WILMINGTON, DEL.—The A. S. Reed & Bro. Co. was awarded the contract, Feb. 20, for the erection of the proposed high school building on Delaware Ave., near Adams St., at $141,600. Calvin I. Swayne was the only other bidder.

NEWPORT NEWS, VA.—It is reported that the contract for erecting a new 6-story office building in this city for Howard C. Silsby, Washington, D. C., has been let to Contractor Wilson, Richmond, Va., at $24,446.

BUCKHANNON, W. VA.—A. F. Withrow & Co., Charleston, W. Va., have been awarded the contract for erecting a court house for Upshur county, at $37,650. Harrison Albright, Arch., Charleston.

BIRMINGHAM, ALA.—T. U. Walter & Ullman, Archs., Birmingham, inform us that the following bids were received Feb. 20 for erecting an administration building and wing for St. Vincent's Hospital; Father F. A. Lennon, Supervisor of the Order of Sisters of Charity, Emmitsburg, Md.:

R. M. Newbold & Co., Birmingham	$64,599
Chas. Moses, Chicago, Ill	65,387
T. C. Thompson & Bro., Birmingham	67,398
Cook & Laurie, Montgomery, Ala. (accepted)	[1]67,939
A. McGilvray, Birmingham	69,068
Nicholas Ittner, Atlanta, Ga	77,855
Meighan & Co., Birmingham	79,753
M. T. Lewman & Co., Louisville, Ky	79,912
Ledgerwood & Campbell, Chicago, Ill	[2]81,000

[1]Plumbing included. [2]Plumbing and electric work included.

LIMA, O.—Bids are asked by the board of education until March 20 for furnishing a mechanical heating and ventilating system (either single or double fan method) for the proposed 16-room school building on East High St. A. J. Morris, Clk.; W. R. Brown, Arch., Cincinnati, O., and Leech & Leech, Archs., Lima, can furnish floor plans.

PORTLAND, IND.—The county commissioners have accepted the plans of M. S. Mahurin, Ft. Wayne, Ind., for a new jail building.

CHAMPAIGN, ILL.—We are informed that the Beardsley Hotel in this city will be enlarged by a 4-story annex to contain an electric light plant, heating, laundry machinery, etc. J. D. Walace, Consulting Engr.

CHICAGO, ILL.—Fires in this city, Feb. 23, destroyed warehouse No. 7 of Swift & Co., causing a loss of about $170,000, and the Lind Bldg., at 28 to 32 Market St., at a loss of about $200,000.——Reports state that John V. Ayer will build a 3-story apartment building at Ingleside Ave. and 65th St., to cost about $50,000. J. F. & J. P. Doerr, Archs., Chamber of Commerce.

ELGIN, ILL.—This town has voted to erect a new $30,000 school building.

JACKSONVILLE, ILL.—Bids are asked by the board of education until March 6 for erecting a new high school building. Samuel B. Stewart, Clk.; N. A. Buckingham & Son, Archs., Alexander Bldg.

IRONWOOD, MICH.—Daniel Eagen, Ashland, Wis., has been awarded the contract for erecting the new high school building at Ironwood, to cost about $30,000, according to reports.

LANCASTER, WIS.—Bids are asked until March 15 for erecting an annex to the Grant County Asylum for the insane and alterations to the present building, and for the heating of both buildings. J. B. Mauer, County Treas.; H. Kleinhammer, Arch., Platteville, Wis.

DES MOINES, IA.—Garthwart & Co., Chicago, Ill., have been awarded the contract for the erection of the new Frankel Bldg., at 6th and Walnut Sts., to cost about $50,000.

IOWA CITY, IA.—Clay Bowers, Shueyville, Ia., informs us that the election to vote upon the proposition of erecting a new court house and a jail building, Feb. 21, carried; estimated cost, $100,000. No plans have yet been adopted.

TOPEKA, KAN.—A fire here, Feb. 23, destroyed the building occupied by the Palace Clothing Co.; reported loss, $60,000.

KANSAS CITY, MO.—Bids are asked by the supervising architect, Washington, D. C., for the interior finish, vault doors and linings, plumbing, gas piping, etc., for the U. S. building in this city.——The following bids were received by the supervising architect, Feb. 23, for a low-pressure and exhaust steam heating, mechanical ventilating apparatus, etc., for the U. S. building at Kansas City:

Bidder.		Time, days.
Chafer & Becker, Cleveland	$57,824	*140
Richard T. Connell, Kansas City	52,017	90
Goss Heating & Plumbing Co., Kansas City	50,080	*140
Edwin D. Hornbrook, Kansas City	54,892	*140
Pittsburg (Pa.) Heating Supply Co	51,940	specd
James Cotter, Kansas City	44,340	*140
Borges Bros. & Co., Columbus	42,341	*140
Cullen & Stock Heating Vent. Co., St. Louis	48,877	*140
Chas. B. Kune Heating Co., Milwaukee	40,974	*140
Front Rank Steel Furnace Co., St. Louis	51,887	*150
J. J. Honighen, Omana	54,900	*140
L. J. Mueller Furnace Co., Milwaukee	41,856	*140
G. A. Suter & Co., New York	49,080	*140
Thomas & Smith, Chicago	60,150	150

*Working days.

DALLAS, TEX.—Contractor Thompson, St. Louis, Mo., is reported to have received the contract for erecting a new station in this city for the Texas & Pacific Ry. Co., to cost about $150,000. Work is to be completed by fall. B. S. Wathen, Ch. Engr., Dallas.

DENVER, COLO.—Contracts are stated to have been let for the new $60,000 Y. M. C. A. building to be erected at 18th and Sherman Aves. J. B. Grant, Chn. of Bldg. Com.; Gore & Walsh, Archs.

MUSCOGEE, IND. TER.—A fire here, Feb. 22, destroyed about one-half of the town; reported loss, about $500,000.

DALLAS, ORE.—Bids are asked until March 22 for building a court house for Polk county. D. D. Neer, Arch., 133½ First St., Portland, Ore.; Eugene Hayter, Clk. County Bd.

ROSEBURG, ORE.—Bids are asked until March 9 for remodeling and completing a brick court house for Douglas county. J. Lyons, County Judge.

SAN FRANCISCO, CAL.—Bids are asked by the U. S. life saving service, Washington, D. C., until March 14, for constructing a life-saving station at Point Bonita, Cal. S. I. Kimball, Gen. Supt.

SAN FRANCISCO, CAL.—Bids are asked until March 30 for the masonry work, roof covering, etc., for the U. S. post office building, court house, etc., as stated in our advertising columns. Jas. Knox Taylor, Supervising Arch., Washington, D. C.

TORONTO, ONT.—Competitive plans are asked by this city until April 3 for the improvement of the St. Lawrence Market. John Shaw, Mayor.

WATER-WORKS.

BROWNVILLE, ME.—The Brownville Water Co. has been incorporated by J. F. Sprague, of Monson, Me.; P. M. Jones, of Brownville, and others. It is proposed to secure water from springs near Henderson and furnish it to this place, Henderson and North Brownville.

NASHUA, N. H.—The Pennichuck Water-Works Co., it is stated by local papers, has awarded contracts for improvements to its works to cost about $100,000 to Chas. W. Stevens for the stone work for the reservoir, and to H. S. Ashley for the wood work, etc. New machinery will also be purchased.

ST. ALBANS, VT.—The Mayor has recommended that water meters be put in the houses of consumers.

BOSTON, MASS.—The Camden Iron Works, Philadelphia, Pa., has been awarded the contract for furnishing 161 tons of cast-iron water pipe with flexible joints, at $4,526. The only other bid was submitted by the Warren Foundry & Machine Co., 100 Broadway, New York, at $4,669.

SALEM, MASS.—The water board has applied for $25,000 to renew certain water mains. It is stated that about $50,000 will be required each year for some years for the renewal of about 40 miles of pipe.

WILLIAMSTOWN, MASS.—The Williamstown Water Co. has applied for permission to increase its capital stock to $200,000 and to issue bonds to the same amount for extending its works. S. B. Clark, Pres.

DELHI, N. Y.—The water commissioners will soon submit the question of building a water filter and a reservoir to the vote of the people. E. F. Musson, Engr., Norwich.

MASSENA, N. Y.—The Massena Water Co. has been incorporated with a capital stock of $5,000 by D. W. Smith, of Elmira, N. Y.; W. B. Berry and P. J. Barry.

NEW YORK, N. Y.—The following bids were received by Wm. Dalton, Comr. Water Supply, Feb. 16, for laying water mains in a number of streets; all local bidders: Patrick F. Burns, 449 St. Anns Ave., $31,105; Frawley & Rooney, 180 E. 95th St., $54,150; Farrell & Hopper, 215 W. 125th St., $40,519; John Cornwell, Jr., 60 E. 127th St., $28,763; Henry Lipps, Jr., Elliott Ave. and Elizabeth St., $25,001; Wm. Dalton, 141 E. 125th St., $30,661; James Kelly, 651 Belmont Ave., Brooklyn, $28,750.

WINDSOR, N. Y.—Bids are asked until March 6 for the purchase of $20,000 of bonds for building the proposed works, bids for which were opened Feb. 24, as advertised in Engineering News. M. A. Tompkins, Clk.

NEWARK, N. J.—The question of putting meters in the houses of consumers is favorably considered by the city officials. About 10,000 meters would be required. A resolution advertising for bids for that number has been introduced. Water Commissioner Van Duyne.

WILLIAMSTOWN, N. J.—The question of building works and an electric plant is being considered.

CLAYVILLE (JEFFERSON COUNTY), PA.—The Lindsey Water Co. was incorporated Feb. 23 with a capital stock of $30,000, of which $3,000 is paid in, by John L. Wentz, Treas., and Edmund J. Robinson, of Scranton.

DOYLESTOWN, PA.—The Bucks County Water & Water Power Co. has been incorporated by Dasser Boyer, Thos. Earle and Dr. A. H. Boyer to secure a water supply and power from the Delaware River about Newhope.

McKEESPORT, PA.—The water commissioners have recommended the purchase of six acres of ground adjoining the present well system for additional wells.

PALMERTOWN (CARBON COUNTY), PA.—The Palmer Water Co. was incorporated Feb. 23 with a capital stock of $25,000, of which $2,000 is paid in, by Abraham P. Cobb, 52 Wall St., New York; J. Price Wetherill, South Bethlehem, Pa.; Wm. S. Cartwright, Mauch Chunk, Pa.

PHILADELPHIA, PA.—The councils are considering an ordinance providing for a new pumping plant to cost $600,000 on the Delaware River, further above than the Frankford pumping station at Lardners Point, which it is proposed to abandon.

WILLIAMSPORT, MD.—An election will be held in March 6 to vote on the question of municipal works and a light plant to cost $20,000. D. G. Adelsberger, Engr., 122 Pennsylvania Ave., Baltimore; Frank L. King, Cy. Clk.

WADESBORO, N. C.—The legislature has been asked to grant this place authority to issue $30,000 in bonds for works and an electric plant.

TUSKEGEE, ALA.—The following bids were received Feb. 15 for furnishing materials and for constructing works, as advertised in Engineering News. Alber & Byrne, Engrs., Birmingham: Maxwell & Co., Birmingham, Ala., without air lift, $16,738; P. H. Porter, Louisville, Ky., $18,634; Guild & Co., Chattanooga, Tenn., $19,475; J. B. Neely, Chattanooga, $19,650; Moore & McCreary, Atlanta (accepted), $17,280. The bid is given under Contract Prices.

AKRON, O.—J. W. Payne, Cy. Engr., writes us that the council contemplates owning the works of the Akron Water Co., but so far has gone no farther than to pass resolutions declaring its intention and to appoint a board of arbitration.

CUYAHOGA FALLS, O.—Hosea Paul writes us that this place voted on Feb. 18 420 for to 216 against the proposition to issue $60,000 in bonds for works. As the proposition requires a two-thirds vote it did not carry. The town is practically without fire protection.

MARTINS FERRY, O.—It is reported that the council will spend about $35,000 in improving the works.

ALBANY, IND.—Jas. B. Nelson, 61 Baldwin Block, Indianapolis, Ind., is preparing plans and specifications for a combined works and electric plant for this town. The plans, etc., will be completed in about two weeks. The report that the contracts have been let is false.

BLOOMINGTON, IND.—Bids are asked until March 23 for reconstructing and extending the works, to cost about $25,000, as stated in our advertising columns. Jas. D. Showers, Secy. City Water-Works Co.; Frank Schefold, Engr., New Albany, Ind.

BOURBON, IND.—The contract for building the works and light plant for the Bourbon Water & Light Co. has been let to the Western Engineering & Construction Co., Chicago, at $25,220. The company was recently incorporated.

MICHIGAN CITY, IND.—A. W. Frehse, Supt., writes us that in all probability there will be put in this spring a new pump of about 5,000,000 gallons capacity, several miles of pipe, etc. The council has not yet decided upon plans.

PORT AUSTIN, MICH.—The council has voted to build works at a cost of about $4,000.

ALTON, ILL.—An election will be held April 10 to vote on the question of municipal works. The franchise of the New England Water Works Co. expires in 1901.

EVANSTON, ILL.—The council has appropriated $1,000 for the purpose of investigating the feasibility of improving the water supply by extending a tunnel a mile further into the lake. Mayor Dyche may be addressed.

SULLIVAN, ILL.—F. M. Waggoner, Cy. Clk., writes us that the question came up in the council recently of voting on the proposition to issue about $60,000 in bonds for a stand-pipe and the purchase of ground for a cemetery. The council did not approve of it, however. It may be considered again after the election to be held April 18.

ELKHART LAKE, WIS.—The Sanitary Construction Co., Green Bay, Wis., has been awarded the contract for building works at $5,000.

SHEBOYGAN, WIS.—The advisability of purchasing the works of the City Water Co. is being considered, according to reports.

HAMPTON, IA.—The question of an increased water supply is being considered.

VALLEY JUNCTION, IA.—The question of granting a franchise for works and a light plant will be voted upon March 27. Mayor Adams and Councilman Nash may be addressed.

CANBY, MINN.—This place has voted in favor of awarding the contracts for works to the Mankato Plumbing Co., Mankato, Minn., at $6,398 for the pipes, etc., and to E. T. Webster, Dubuque, Ia., at $2,690 for steel tower and tank.

MINNEAPOLIS, MINN.—Bids are asked until March 10 for furnishing 10 16-in. valves for the use of the water department. L. A. Lydiard, Cy. Clk.; G. W. Sublette, Cy. Engr.

CULBERTSON, NEB.—It is stated that the water tank of 3,000 bbls. capacity was destroyed by fire Feb. 17. A new steel standpipe will probably be erected.

SIOUX FALLS, S. DAK.—The legislature has passed the bill authorizing the construction of municipal works. B. H. Lien, Mayor.

KANSAS CITY, MO.—D. W. Longwell, Supt. Water-Works, has asked for authority to spend $70,000 for a new 30-in. main from Kaw Point to Turkey Creek. W. Kiersted, Ch. Engr., writes us that further improvements are contemplated to the water supply, plans for which are not yet completed.

ST. JOSEPH, MO.—This city voted, Feb. 25, to grant a franchise for works to Judge R. E. Culver, and also in favor of a contract with Judge Culver to furnish the city with water for 20 years at $50,000 a year. The Seckner Contracting Co., Chicago, was recently awarded the contract for building the works, at about $800,000.

MENA, ARK.—Jos. P. Landes, Secy. Water Comrs., writes us that plans for works are being prepared. Bids will probably soon be asked. Mr. Landes wishes to secure the addresses of manufacturers of pumps, machinery, etc.

S. L. Lindsay, Chn. Com.

GOLDEN, COLO.—An election was held Feb. 28 to vote on the question of issuing $45,000 of 5% bonds for gravity works. The source of supply will be Beaver Brook, about 10 miles from here. Mayor Ruby may be addressed.

FLORENCE, COLO.—We are informed that this town will soon be in the market for the purchase of about 500 water meters and prices for the same are solicited. Hiram Phillips, Engr., 306 Oriel Bldg., St. Louis, Mo.; P. T. McGuire, Mayor.

SAN ANTONIO, TEX.—Press reports state that C. H. Dean wants bids for furnishing a 100,000-gallon standpipe, wrought-iron pipe, pump, castings, etc.

ANTELOPE, ORE.—Bids are asked until March 12 for repairing and cementing the reservoir. Max Lueddemann, Recdr.

PENDLETON, ORE.—Mayor Vincent writes us that the city will put in a compound condensing pump of 1,500 gallons a minute and take up all the old mains and replace with larger ones; estimated cost, about $25,000. A. C. Adams, Engr., 400½ S. Broadway, Los Angeles, Cal.

LAKEPORT, CAL.—Bids will be asked until about April 5 for constructing the proposed works. The plant will have a compound duplex engine of 500 gallons a minute, raised 100 ft. a half mile to a concrete lined reservoir of 200,000 gallons capacity. The reservoir will be 200 ft. above the town and two miles distant. There will also be about four miles of 4, 6, 8 and 10-in. lap-welded pipe; estimated cost of works, $15,000. Des. Engr., Geo. M. Dodge, San Rafael, Cal.; Clk., H. V. Keeling.

MARYSVILLE, CAL.—The Yuba City Water-Works Co. will make a number of improvements to its works. H. A. Walton, Jr., may be addressed.

SAN FRANCISCO, CAL.—The Spring Valley Water-Works Co. is reported as arranging for the construction of a filter to cost $450,000. It will be 300 × 1,000 ft.

WATSONVILLE, CAL.—It is estimated that new works for this place will cost about $50,000. V. T. McCray may be addressed.

DAWSON, N. W. TER., CAN.—J. A. Acklen, of Los Angeles, Cal., has secured a franchise for works for this place from the Canadian government. Mr. Acklen left last week for Dawson, according to local papers. The supply will be secured from the Klondike River, about three miles from here.

SAN JUAN, PORTO RICO.—It is stated that Col. A. S. Kimball, Q. M., Army Bldg., New York, received the following bids last week for windmills, pumps, etc., for San Juan de Porto Rico: Manning, Maxwell & Moore, windmill, pumps, etc., with pine tank, $2,030; with cypress, $2,165. Challenge Windmill & Feedmill Co., $1,870. Aermotor Co., pine, $2,034; cypress, $2,170. Cornell, Underhill & Boyd, $1,875. John Simmonds Co., $1,872. Andrew Corcoran, $3,038.

IRRIGATION.

ALBUQUERQUE, N. MEX.—The Albuquerque Land & Irrigation Co. has awarded a contract to the Shutt Improvement Co., Pueblo, Colo., for constructing a canal about 20 miles long to irrigate 25,000 acres in the Rio Grande Valley, as advertised in Engineering News, Jan. 19. P. E. Harroun, Engr.

COVINA, CAL.—The Covina Irrigating Co. has instructed J. R. Elliott, Supt., to purchase cement for the cement and concrete work of the reservoir.

RAYWOOD, TEX.—Reports state that the Raywood Irrigating & Milling Co. has been incorporated, with a capital stock of $300,000, to construct a canal, at a cost of $125,000, to irrigate 15,000 acres of rice lands in Liberty county. Machinery to cost about $100,000, including a 500-HP. engine and pumps with a capacity of 90,000 gallons per minute, is being contracted for. Pres., William Miller, Des Moines, Ia.; Secy., W. H. Harwood, Raywood.

FLORENCE, ARIZ.—Jas. D. Schuyler, 401 Douglas Block, Los Angeles, Cal., has received from the U. S. Geological Survey the appointment of consulting engineer on the foundations, plans and general feasibility of the proposed dams at the Buttes on the Gila River, near Florence, and on Queen Creek, in the same vicinity. Borings are now in progress with machinery used in testing foundations on the line of the Nicaragua Canal. Arthur P. Davis, of the U. S. Geological Survey, Washington, D. C., is in charge of the explorations. The government is expected to build one of these dams for the storage of water to supply irrigation facilities to the Pima Indian Reservation.

SEWERAGE.

CLINTON, MASS.—Owen Cunningham & Son have given up the contract for constructing the intercepting sewers, and the sewage pumping station awarded them some time ago by the Metropolitan Water Board.

MILTON, MASS.—A town meeting will be held on March 6 to vote on the various appropriations, one of which is for $50,000 for a system.

ALBANY, N. Y.—At a meeting of the board of contract Feb. 20 the city engineer was directed to prepare specifications for paving Howard and William Sts. and for sewers in the same and in Morris and Rose Sts.

BUFFALO, N. Y.—Bids are asked until March 8 for constructing 20 to 12-in. pipe and 54 to 27-in. brick sewers in several streets. R. G. Parsons, Secy. Dept. Pub. Wks.

CARNEGIE, PA.—Plans for a system have been submitted to the borough council. There will be 9,200 ft. of 20-in. main pipe sewer. Councilmen Bigham, Hanna and Shinn, may be addressed.

EASTON, PA.—Bids are asked until March 9 for constructing a brick sewer in Nevin Park. H. R. Fehr, Cy. Engr.

ELLWOOD, PA.—This place has voted to issue bonds for sewers. Councilmen Boyd and Stevenson may be addressed.

GREENVILLE, PA.—J. W. Vaughn, Burgess, writes us that the borough is about to ask for bids for building pipe sewers to cost $6,000 and for 5,000 lin. ft. of brick paving and curbing.

YORK, PA.—The board of trade has secured estimates, etc., for a system to cost about $200,000. It is estimated that the system will require about 30 miles of 30 to 6-in. pipe sewers, a sewage disposal and pumping plant, etc.

YOUNGSTOWN, PA.—The council has passed a resolution to construct storm water sewers to relieve districts Nos. 3 and 4. F. C. Brown, Clk.; A. L. Rowland, Pres. Council.

VALDOSTA, GA.—The council proposes to submit to the people the question of issuing about $20,000 in bonds for a system.

ASHLAND, O.—Surveys are being made for a system and sewage disposal works. The question of issuing bonds will probably be voted upon soon. Population (1890), 3,556. J. B. Weddell, Mansfield, O., and F. L. Neiderhieser, Ashland, are the engineers. City Clerk Westover may be addressed.

CONNEAUT, O.—The council has voted to build sewers in District No. 3. Councilmen Hand, Macbeth and Wilcox may be addressed. C. H. Timmonds, Mayor; J. L. Risley, Clk.

MARTINS FERRY, O.—The council has voted to build a system at a cost of about $50,000, according to reports.

TOLEDO, O.—Bids are asked until March 13 for furnishing the materials and constructing a 24-in. brick and 15-in. pipe sewers in certain streets. W. O. Holst, Cy. Clk.

DETROIT, MICH.—Bids are asked until 10 p. m., March 4, for constructing lateral sewers in two streets. D. W. H. Moreland, Pres. Bd. Public Wks.

LAURIUM, MICH.—Bids are asked until March 14 for constructing about 23,640 ft. of 10 and 8-in. sanitary sewers; 7,000 ft. of 24 to 12-in. storm water sewers, and 680 ft. of 30-in. brick sewer; 9,000 ft. of drain tile, etc.; 92 manholes, 44 catchbasins, etc., as stated in our advertising columns. C. F. Loweth, 94 East 4th St., St. Paul, Minn., and 301 3d St., Davenport, Ia.; J. R. Murphy, Clk.

PONTIAC, MICH.—Bids are asked until March 24 for constructing 500 ft. of 12-in. and 1,200 ft. of 10-in. sewers, as stated in our advertising columns. Wm. J. Fisher, Cy. Engr.

AUBURN, IND.—The council has decided to build a system at a cost of about $50,000, according to reports.

WAUWATOSA, WIS.—A committee, consisting of Mayor Hoyt, Aldermen Kneeland and Rogers, has been appointed to consider the question of a joint system with the county.

CHARLES CITY, IA.—The council has voted to build a sewer in the district east of Main St.

VALLEY JUNCTION, IA.—It is stated that the council has decided to build a system this year. Mayor Adams may be addressed.

EAST GRAND FORKS, MINN.—Bids are asked until March 7 for constructing a sewer. Henry Harm, Cy. Recdr.

FOLSOM, CAL.—Governor Gage has vetoed the bill recently passed by the legislature authorizing the construction of a system of sewerage at the state hospital at this place, to cost $15,000.

SAN FRANCISCO, CAL.—The Sunset District Improvement Club has recommended to the supervisors the completion of the main intercepting sewer 800 ft. into the Pacific Ocean, near W St., at a cost of about $250,000.

WATSONVILLE, CAL.—V. T. McCray has submitted a report to the trustees for the proposed system. It will have 69,400 ft. of pipe, 2,900 ft. of 4-in. connections, 114 manholes, 46 flushtanks, etc.; estimated cost, $40,000.

ST. MARY'S, ONT.—The question of building a system and water-works is being considered by the board of trade. Robert Dickson, Chn. Bd.

VANCOUVER, B. C.—It is stated that the mayor and the city engineer are preparing estimates for a system for this city.

GARBAGE DISPOSAL—STREET CLEANING

FALL RIVER, MASS.—Bids are asked until 4 p. m., March 3, for collecting, removing and disposing of the garbage, etc., for one, two, three or five years. John Westall, Chn. Com.; G. S. B. Pritchard, Clk. Com.

LOWELL, MASS.—Dr. Packer has recommended the construction of an Arnold garbage crematory, to cost about $20,000. Alderman Derby, Chn. Com.

BRIDGEPORT, CONN.—The board of apportionment has voted to appropriate $14,000 for a garbage crematory. President Havens, Bd. of Health.

MERIDEN, CONN.—The following bids were received by E. S. Smith, Chn., for collecting and disposing of the garbage for two years: Geo. Britney, $2,800; W. F. Cotter, $2,700, and E. H. Higginson (accepted), $2,400.

NEW YORK, N. Y.—Jas. McCartney, Comr. St. Cleaning, 346 Broadway, Manhattan Borough, has had plans prepared for a new dump pier to cost about $50,000.

ROCHESTER, N. Y.—Bids are asked by the board of health until March 31 for collecting and disposing of the garbage for one year, the contract with the Flower City Reduction Co. having been rescinded.

CAMDEN, N. J.—The council has let the franchise for a garbage crematory to Benj. F. Howland, Philadelphia, who will collect and dispose of the city garbage for $150 a month.

WILMINGTON, DEL.—A bill has been presented to the legislature authorizing the board of health of the city to secure control of the garbage crematory.

MADISON, IND.—Bids are asked until March 6 for removing the garbage of the city for one year from March 15, according to report. G. C. Lewis, Secy. Bd. Health.

MILWAUKEE, WIS.—A new proposition has been presented to the aldermen through Alderman Henry Smith for the erection of a crematory.

LOS ANGELES, CAL.—The following bids were received by the council Feb. 13 for the removal of the garbage, etc., for three years: A. I. Crane and Edward Culvert, $51,670 for three years and four months; Franklin & Alexander, the present contractors, $37,000 (accepted); L. H. Mitchell, $47,000; Ranish & Marsh, $1,055 a month; D. F. Donagan, $41,000.——J. W. Northrup, San Francisco, has applied for a 25-year franchise.

SACRAMENTO, CAL.—Dr. F. G. Fay, of the committee on garbage disposal of the board of health, writes us that he wishes to be placed in communication with places that have garbage crematories in operation, and also wishes to secure literature on the subject, as it is proposed to construct a plant here in the near future.

SALT LAKE CITY, UTAH.—Bids are asked until 5 p. m., March 6 for delivering f. o. b. cars, Salt Lake City, 15 sprinkling wagons of 750 gallons each, and 10 of 800 gallons. They are to have wooden tanks and the latest attachments. Robt. Patrick, Chn. Sprinkling Com.

STREETS AND ROADS

BOSTON, MASS.—Bids are asked by the Metropolitan park commission, 14 Beacon St., until March 6 for constructing the Blue Hills Parkway, requiring about 20,000 cu. yds. earth grading, 1,000 cu. yds. rock grading, 50,000 cu. yds. filling material, 9,600 lin. ft. pipe drains, 600 cu. yds. brick masonry, 350 cu. yds. rubble masonry, 2,100 lin. ft. edgestone, 7,800 cu. yds. gravel surfacing, 15,000 cu. yds. loam surfacing, 7,000 cu. yds. loam, 5,000 tons broken stone surfacing. Wm. T. Pierce, Engr.

DEDHAM, MASS.—The Metropolitan park commission is in favor of constructing a boulevard between the town of Dedham and Stony Brook reservation; estimated cost, $30,000.

WOBURN, MASS.—Frank B. French, Supt. Pub. Wks., has asked the council for an appropriation of $1,810 for the purchase of a stone crusher.

ALBANY, N. Y.—Horace Andrews, Cy. Engr., has been directed to prepare plans, etc., for paving and sewers in Howard and William Sts.

ANTWERP, N. Y.—Reports state that this town will purchase a stone crusher.

BRIGHTON, N. Y.—Bids are asked by the state engineer, Albany, N. Y., until March 6 for improving the East Ave. Road in the towns of Brighton and Pittsford, Monroe county. Arthur J. Rockwood, Div. Engr., Rochester, N. Y.

BUFFALO, N. Y.—Bids are asked until March 8 for furnishing paving stone, curbing, flag, sand, etc., for the year 1899. R. G. Parsons, Secy. Bd. Pub. Wks.

FULTON, N. Y.—The village trustees have awarded a contract to John Hendrick, Oswego, N. Y., at $8,987, for macadam filling on Second St.

PEEKSKILL, N. Y.—It is reported that the question of issuing $100,000 of paving bonds will be voted upon at the election March 7.

JERSEY CITY, N. J.—Bids are asked until March 7 for 7,000 cu. yds. of earth excavation; 300 cu. yds. of rock removal, 10,000 cu. yds. of earth fill, 2,100 sq. ft. of bridge stone, 25,300 sq. ft. of flag, etc., on Garfield Ave. Geo. T. Bouton, Clk., St. and Water Comrs., City Hall.

EASTON, PA.—Bids are asked until March 9 for paving about 5,779 sq. yds., on Washington and Northampton Sts. with brick on 6 ins. concrete, and curbing and flagging on New St. H. R. Fehr, Cy. Engr.

GREENVILLE, PA.—J. W. Vaughn, Burgess, informs us that bids are soon to be asked for about 5,000 lin. ft. of brick or block paving and curbing. Bonds will be issued for payment.

MAUCH CHUNK, PA.—The city clerk informs us that it was decided at the borough election Feb. 21 not to issue bonds for paving.

PHILADELPHIA, PA.—Bids are asked by the department of charities and correction until March 10 for paving driveways with sheet asphaltum.

TURTLE CREEK, PA.—The council is considering a proposition to improve portions of about 10 streets; estimated cost, about $45,000.

WASHINGTON, D. C.—Bids are asked by the district commissioners until March 18 for improving L St., eastward from North Capitol St.

WINCHESTER, VA.—P. W. Boyd, Supt. Water and Sts., informs us that an ordinance has been introduced in the council to pave about 950 sq. yds.

BILOXI, MISS.—The council has passed an ordinance to issue $25,000 of additional bonds for paving the principal streets, making a total of $40,000, according to reports.

JACKSON, MISS.—H. M. Taylor, Mayor, informs us that bonds for street paving will probably be issued in the near future.

NASHVILLE, TENN.—The board of public works has submitted a bill to the council to appropriate $20,000 to pave the public square with brick.

LOUISVILLE, KY.—The board of park commissioners has decided to expend about $36,000 for improving the roadways in the different parks.

LEXINGTON, KY.—An ordinance will be introduced at the next meeting of the council for asphalt paving on Vine and North Limestone Sts., for which plans have been prepared by the city engineer. The improvement committee also recommends asphalt paving for West Third, Walnut and West Maxwell Sts.

NEWPORT, KY.—W. L. Glazier, Cy. Engr., writes us that Maple Ave., Sixth and Eighth Sts, from Columbia to York St., will be reconstructed with brick as soon as the ordinance passes.

GEORGETOWN, O.—Bids are asked until March 14 for improving roads in Jefferson township, and until March 15 for road work in Lewis township, according to reports. H. L. Jennings, County Audr.

TOLEDO, O.—Bids are asked until March 27 for furnishing the material and constructing asphalt paving, grading, curbing, etc., on Woodruff Ave. and 23d St. Wm. O. Holst, Cy. Clk.——The street committee has awarded contracts for paving with Harris block and Medina stone curbing to Harry Jennison, at $13,310, on Milburn Ave., and to Geo. H. Bodette, at $9,223, on Monroe St.

ANDERSON, IND.—The question of paving about two miles of streets with asphalt, brick or creosoted block, to cost about $100,000, is being considered. H. H. Rogers, Cy. Engr.

BROWNSTOWN, IND.—Bids are asked until March 10 for graveling or macadamizing about 16 miles of roads, according to reports. John D. Durment, County Audr.

INDIANAPOLIS, IND.—Bids are asked by the department of public works until March 8 for grading and brick paving in 12 alleys.

ALMA, MICH.—Reports state that the council will purchase a steam road roller and stone crusher. About $4,000 will be expended for macadamizing, etc.

DETROIT, MICH.—The board of public works has submitted estimates of the proposed paving for the fiscal year, amounting to $265,700 for asphalt, $104,031 for brick and $265,440 for cedar block.

GRAND RAPIDS, MICH.—The board of public works has adopted plans, etc., for asphalt paving on Ottawa St. and Jefferson Ave. The city engineer has submitted estimates for brick gutters on Turner St. at $19,780; asphalt paving, Hailey Place, $3,869; brick gutters, $2,465.

SOUTH HAVEN, MICH.—It has been voted to expend about $12,000 for brick paving. Geo. S. Pierson, Engr., Kalamazoo, Mich.

BLOOMINGTON, ILL.—J. E. Melluish informs us that an effort is being made to construct several miles of roadways.

CHAMPAIGN, ILL.—Bids are asked until March 9 for brick paving in Second, South and Washington Sts., as stated in our advertising columns. J. R. Scott, Pres.

LA SALLE, ILL.—Ordinances have been passed by the council for about 35 blocks of brick paving, grading and curbing, to cost between $60,000 and $70,000.

ROCKFORD, ILL.—The council has passed ordinances for grading, curbing and macadamizing on portions of 13 streets, at a cost of about $40,000.

OCONTO, WIS.—The council has decided to purchase a stone crushing machine and steam road roller.

ST. LOUIS, MO.—Bids are asked until March 10 for improving portions of 21 streets. Robt. E. McMath, Pres. Bd. Pub. Wks.——The board has decided to pave on Labadie Ave., to cost about $10,041, and Vandeventer Ave., $2,940, and construct granite sidewalks on Russell Place, $2,300.

BEAUMONT, TEX.—The Port Arthur Land Co. will be required by the county commissioners to construct a road from Taylors Bayou south to Sabine Pass.

COLORADO SPRINGS, COLO.—Wm. C. Jones, Chn. Com., has asked the council for an appropriation of $65,000 for the street department. It is proposed to purchase a steam road roller.

DENVER, COLO.—The Colorado Paving Co. has been awarded a contract for repairing asphalt pavement for the year 1899.

PUEBLO, COLO.—The bill providing for street paving has passed the legislature and the work of paving the principal streets will be undertaken at once, according to reports.

SAN DIEGO, CAL.—The committee of the board of supervisors has recommended the grading and macadamizing of six streets.

MANUFACTURING PLANTS.

SAUNDERSVILLE, MASS.—Smith & Co., Pawtucket, R. I., are said to have received the contract for erecting a new 2-story brick building, 70 × 60 ft., at this place, for the Saunders Cotton Mills.

AUBURN, N. Y.—The shops of David Wadsworth & Son, scythe and knife manufacturers, were destroyed by fire Feb. 15; reported loss about $75,000.

BEAVER FALLS, PA.—H. G. Wassen, Pittsburg, is reported as about to erect a plant here for the manufacture of seamless bicycle tubing, at an estimated cost of $175,000.

MONROE, LA.—The Planters' cottonseed oil mill was almost destroyed by fire Feb. 26; reported loss, $80,000.

PHILADELPHIA, PA.—The iron foundry of Stewart & Mattison, Tenth St., near Diamond, was destroyed by fire Feb. 20; reported loss $50,000.——A fire in the yarn spinning mill of George Campbell & Co., Alter St., near 21st, Feb. 19, destroyed stock and machinery to the value of about $40,000.

BALTIMORE, MD.—A brewery building 45 × 130 ft. is soon to be erected at Highlandtown by the Monarch Brewing Co., at a cost of $230,000, according to reports.

CLOVER, S. C.—L. W. Cooper & Co., of Gaffney, S. C., are said to have the contract for the erection of the new mill building for the Clover Cotton Mfg. Co. About 5,000 spindles will be installed at present. M. L. Smith, Treas.

GRAND JUNCTION, COLO.—E. H. Dyer & Co., 705 New England Bldg., Cleveland, O., contractors for the new sugar factory for the Colorado Sugar Mfg. Co., noted last week, are now receiving bids for the cement floors, roofing, iron pipes, etc. We are informed that the building will cost about $75,000 and the equipment $225,000.

SOCORRO, N. MEX.—It is reported that plans are being made for enlarging the plant of the Socorro Fire Clay Co. The plant has a capacity of 20,000 brick per day. James Lyon, who was formerly connected with the Union Fire Clay Co., of Denver, is superintendent.

GAS PLANTS.

PEEKSKILL, N. Y.—The Peekskill Gas Light Co. has applied to the village trustees for an extension of its franchise, according to reports.

COOPERSTOWN, N. Y.—We are informed that the gas works which were destroyed Feb. 10 will not be rebuilt and that the property will be offered for sale.

BINGHAMTON, N. Y.—Bids are asked until March 21 for furnishing and maintaining about 550 naphtha and gas lamps for one to three years, as described in our advertising columns. S. D. Kane, Cy. Clk.

DARBY PA.—F. W. Shelton, Secy. and Mgr., Philadelphia & Suburban Gas Co., informs us that bids are wanted at once for constructing 12 to 15 miles of 4 to 16-in. wrought-iron and cast-iron mains. New works and machinery have been already arranged for.

PORT HURON, MICH.—The Port Huron Gas Co. has voted to extend its mains, at a cost of about $25,000.

OSAGE, OKLA.—A. C. Tonner, Acting Comr. of Indian Affairs, Washington, writes us that the following bids were received, Feb. 13, for installing a gasoline gas plant at the Osage agency: Matthews Gas Machine Co., 36 Dearborn St., Chicago, Ill., $2,875, for one 150 and one 100-HP. gas machine and combination mixing regulator; $3,050, for one 100 and for one 50 and 100-HP. gas machine, etc.; Geo. E. Hopper, Arkansas City, Kan., $3,000, in detail as to items required or to be furnished, to be considered as a whole and not as a divided bid on separate parts.

MISCELLANEOUS CONTRACTS.

WHARF.—Hull, Que.—The department of public works, Ottawa, Ont., will construct a wharf to cost about $50,000.

DRY DOCK.—Algiers, La.—The Maryland Steel Co., Sparrows Point, Md., has been awarded the contract for the government dry dock.

TURBINE.—Carlisle, England.—Reports state that J. A. Hope, Petteril Bank, Carlisle, wishes to purchase a turbine to drive rolling mills.

BONDS.—St. Thomas, Ont.—Bids are asked until March 1 for the purchase of $40,000 of bonds, according to reports. W. McKay, County Clk.

LEVEE WORK.—Pueblo, Colo.—The council has awarded a contract to C. I. Manners, at $21,931, for constructing a levee on the Arkansas River.

DOCK.—Rondeau, Ont.—The Lake Erie & Detroit River Ry. Co. is preparing to construct a dock and slip at this place, to cost about $20,000.

CAST-IRON PIPE.—Dursley, England.—Bids are asked by R. A. Lister & Co., Ltd., Dursley, Gloucester, for 6,000 ft. of 3-in. cast-iron pipe, according to reports.

MOORING STONES.—Portland, Me.—Bids are asked until March 23 for furnishing mooring stones for one year. Jas. K. Cogswell, Commander, 1st Lighthouse District.

CANAL WORK.—Oakland, Cal.—Bids are asked until March 15 for constructing gates, culverts and canalways across 12th St. dam. H. W. Thomas, Secy. Bd. Pub. Wks.

PARK WORK.—New York, N. Y.—Bids are asked by the department of parks, Arsenal, Central Park, until March 9, for furnishing bar iron, and for constructing wire fences.

TELEPHONE CONDUITS, ETC.—Providence, R. I.—The council has passed an ordinance providing for the placing of all low-tension wires underground in the close fire district.

DRY DOCK.—Mare Island, Cal.—Bids will be asked by the navy department in about two weeks for constructing a new timber dry dock 750 ft. long, 30 ft. deep and 80 ft. wide, according to reports.

DRY DOCK.—Philadelphia, Pa.—The Cramp & Sons Ship & Engine Building Co., has been authorized to issue $1,500,000 5% bonds, and will now be in a position to construct the new dry dock.

DOCKS.—Chicago, Ill.—Bids are asked until March 28 for dredging and constructing docks in the Chicago River, as stated in our advertising columns. Maj. W. L. Marshall, U. S. Engr., 1637 Indiana Ave., Chicago.

STONE HEADS.—Newark, N. J.—The park commissioners received the lowest bid Feb. 20 for constructing stone heads to subways Nos. 1 and 2 in Branch Brook Park, from Norcross Bros., New York, at $15,187, for Indiana limestone.

ENGINEERS' SUPPLIES.—New York, N. Y.—Bids are asked by the department of charities, East 26th St., until March 15, for furnishing engineers' supplies, including iron pipe, steam fittings, valves and cocks, plumbing material, gas fittings, etc.

DITCH.—Fremont, Neb.—Bids are asked until April 10 for digging a ditch 700 ft. long to straighten the channel of the Elkhorn River, near Crowell, and for 350 ft. of piling and riprap work on the Platte River. C. A. Manville, County Clk.

RETAINING WALL.—Pittsburg, Pa.—Reports state that Wilkins & Davison, Engrs., have awarded a contract to the Beaver Stone Co. for constructing a retaining wall 600 ft. long, 15 ft. high and requiring about 1,900 cu. yds. of masonry, at Turtle Creek.

SHELLS.—Washington, D. C.—The navy department has received the following lowest bids for furnishing shells: The Petersburg Iron Works, 500 cast-iron 6-in. shells; Carpenter Steel Co., 600 armor-piercing 6-in. shot; Taylor Iron & Steel Co., 1,500 armor-piercing 6-in. shells.

PIER.—New York, N. Y.—The Compagnie Generale Des Asphaltes De France, Ltd., 32 Broadway, have awarded the contract for the erection of a new pier on its property at the foot of 17th St., Borough of Queens, New York, to James D. Leary, 22 State St., New York at a cost of about $10,000.

BUOY MAINTENANCE.—Buffalo, N. Y.—Bids are asked by the lighthouse inspector at Buffalo until March 15 for maintaining all the buoys now in Niagara River, at Waverly Shoal, Lake Erie, and in the approaches to the harbor of Buffalo, for one year from July 1. Franklin Hanford, Commander, U. S. Navy.

DRAINAGE SYSTEM.—Albion, Ind.—A county drainage system will be constructed to drain the swamps, from Bear Lake. The main ditch will be 10 miles long, and laterals about 64 miles long; 19 miles will be of tile, requiring about 654,793 cu. yds. of excavation; estimated cost, $75,000. A dredge will be used.

TELEPHONE WORK.—Lorain, O.—The Black River Telephone Co. has decided to put in a new switchboard and increase its capital stock to $50,000. The secretary of state has been asked for permission to construct a tunnel under the river for telephone and electric wires and gas mains. J. B. Hoge is interested.

FOOTWAY TUNNEL.—London, England.—On the recommendation of the bridges committee of the London county council, it was decided on Feb. 14 to award the contract for building the new footway tunnel under the Thames River at Greenwich, to John Cochrane & Sons, 5 Victoria St., S. W., London, at £100,500, or about $547,500.

PILE PLATFORM.—Boston, Mass.—The following local bids were received by the harbor and land commissioners Feb. 21 for constructing an oak pile platform, as advertised in Engineering News:

	Platform.	Bal-last
Miller & Ellis, 17 Milk St.	$144,844	$1.00
Thos. A. Rowe, 209 Washington St.	133,975	1.00
J. N. Hayes & Co., 17 Otis St.	160,000	1.10
Thos. E. Ruggles, 17 Otis St.	149,950	1.00
W. H. Keyes, 17 Otis St.	129,758	1.15
G. A. Cahil, Wolsey Block.	119,872	1.00
Morrison Bros., 45 Milk St.	166,495	1.15
Geo. H. Cavanagh, 164 Devonshire St.	170,000	1.10
Aug. Bellevue & Co., 17 Otis St.	134,901	1.00
Wm. J. Lawler, 16 City Square	141,000	2.00
Wm. J. Lawley, 16 City Square	135,280	1.50
Perkins, White & Co., 16 City Square	141,000	2.00

DREDGING AND PIER WORK.—New York, N. Y.—Bids are asked by the department of docks and ferries, Pier A, North River, until March 10, for dredging about 200,000 cu. yds. in the North River; and for constructing two new wooden piers, repairing and extending platform, repairing bulkhead and removing two piers, at the Wallabout Basin.

TELEPHONE WORK.—Wilkesbarre, Pa.—The People's Telephone Co. has placed orders for a switchboard and telephones with the Kellogg Switchboard & Supply Co., of Chicago, Ill.; cables from a Pittsburg manufacturer, and bare and insulated wire from the Hazard Wire Rope Works of this city. The entire new plant will cost about $300,000, according to reports. Abram Nesbitt, Pres.; Samuel E. Wayland, Mgr.

CONTRACT PRICES.

LEVEE WORK.—New Orleans, La.—The United States engineers on Feb. 13, 1899, let the contract for 22,000 cu. yds. of earth work for the Palmyra Island levee, Lower Tensas District, to T. A. Helgason, at 10.90 cts. a cu. yd. Bids were received from Clark & Reagan at 16.23 cts. and from H. J. Loonan at 11.40 cts. a cu. yd.

COAL YARD, BUILDINGS, ETC.—Philadelphia, Pa.—The director of public works received the following bids Feb. 23 for contract No. 49 of the Pennsylvania subway and tunnel, this contract being for the coal yard, buildings, etc., at 15th and Callowhill Sts.; all local bidders; the contract was let to Ryan & Kelley:

Bids Received at Philadelphia, Pa., Feb. 23, 1899, for Constructing Coal Yard, Buildings, Etc.

Quantities.		Stacey B. Opdyke, Jr., 1222 Belmont Ave.	McFarland & Butler, 1432 South Penn Square.	Ryan & Kelley, 8 So. Broad St.	The McManus Const'n Co., 41 So. 15th St.	Macey, Henderson & Co., Ltd., 1215 Filbert St.	E. D. Smith & Co., 24th & Penn. Ave.
Stable, complete with all appurtenances		$3,380	$3,670	$2,700	$4,900	$2,602	$3,547
Office building and scale, complete with all appurtenances		1,420	1,290	1,300	2,950	1,287	1,554
Trestle track and bumpers, complete, all appurtenances		3,371	3,169	2,950	4,375	3,312	4,647
Excavation	5,300 cu. yds.	1.25	.87	.75	.95	.95	1.00
Complete, and in place: Piles	300 lin. ft.	.20	.12	.30	1.00	.50	.20
Foundation platform	500 ft. B.M.	24.00	20.00	40.00	35.00	35.00	30.00
Concrete	10 cu. yds.	7.00	4.00	5.00	5.00	7.05	5.45
10 × 30-in. coping	350 lin. ft.	1.90	3.19	1.50	4.75	1.30	1.60
6-in. bluestone coping	70 " "	1.90	.80	1.50	.37	1.45	1.00
Resetting old coping	60 " "	.40	.10	.50	.20	.25	.50
18 × 18-in. French drain	250 " "	.80	.23	.30	.70	.18	.30
4-in. cast-iron weepers	70 " "	1.00	.02	.40	.25	.22	.30
Granite block paving on sand base	970 sq. yds.	2.45	2.35	1.75	1.95	2.75	2.75
Granite crossing stones	30 lin. ft.	1.35	1.90	.70	1.30	.80	1.20
6-in. granite curb	50 " "	1.25	.80	.90	.98	1.10	1.20
6-in. curved granite curb	50 " "	2.25	1.30	1.60	1.95	1.65	1.60
Rubble masonry, above neat line	500 cu. yds.	8.00	4.30	5.50	5.80	6.95	6.50
Rubble masonry, below neat line	230 " "	7.50	3.95	5.00	5.50	5.35	5.50
Resetting old curb	50 " "	.50	.10	.20	.50	.20	.25
Paving brick sidewalks	500 sq. yds.	.80	.70	1.00	.50	1.18	1.00
Additional brick work in lime mortar	10 cu. yds.	9.00	7.00	9.00	4.50	7.60	10.00
Wooden fence	190 lin. ft.	2.00	1.55	2.25	1.50	1.85	1.10
Iron fence and gate	250 " "	1.50	1.53	1.25	1.00	1.15	1.60
Additional yellow pine lumber, trestles	1,000 ft. B.M.	35.00	22.00	40.00	35.00	35.00	40.00
Yellow pine lumber, buildings, etc.	1,000 " "	45.00	22.00	50.00	35.00	35.00	40.00
White pine lumber in buildings, etc.	500 " "	60.00	10.00	60.00	35.00	45.00	40.00
4-in. terra cotta pipe	50 lin. ft.	.40	.03	.20	.50	.24	.60
6-in. terra cotta pipe	50 " "	.45	.05	.25	.67	.28	.75
Derailing switches, complete	12 each	50.00	25.00	50.00	120.00	35.00	70.00
Total		$26,748	$21,609	$19,974	$29,153	$22,734	$25,845
Time		6 mos.	4 mos.	4 mos.	3 mos.	4 mos.	4 mos.

WATER WORKS.—Tuskegee, Ala.—We are informed that Moore & McCreary, Atlanta, Ga., were awarded the following contract, Feb. 15, 1899, for furnishing the materials and for constructing the proposed water-works, as advertised in Engineering News: Alber & Byrne, 1821 Second Ave., Birmingham, Ala.; W. W. Thompson, Mayor: the total bids are given under Water-Works: Pipe—334.5 tons 8, 6 and 4-in. cast-iron pipe, $23 a ton; 5 tons of specials, $50; 35 hydrants, $20.75 each; 3 gate valves, 8-in., $13.50; 2 gate valves, $9.50; 10 gate valves, $5.50; 15 valve boxes, $2.25; laying 3,840 ft. of 8-in. pipe, 8¼ cts.; 3,350 ft. of 6-in., 7 9-10 cts.; 17,750 ft. of 4-in., 6 9-10 cts.; 2 duplex pumps, 12, 7, 12-in., $1,070; 1 duplex pump, 4½, 3, 4-in., $60; 1 vertical heater, $85; foundations and setting the above, $75; air lift, including foundations, $1,000; 2 tubular boilers, 54-in. × 14 ft., $1,124; 1 stand-pipe, 12 × 100 ft., including foundations, $2,355; 1 pumping basin, 35 × 12 ft., $425; power house, 64 × 25 ft., corrugated steel, $450; sinking well, 8-in. casing, $4 a ft. Total, $17,284.

PAVING AND SEWER.—Scranton, Pa.—The following bids were received in councils, Feb. 16, 1899, for paving East Market St., from the Lackawanna River to the Boulevard, with vitrified brick, on a 6-in. concrete base; also for setting 6 × 15-in. curb on a 6-in. concrete base: Mears & Flynn, pavement, $1.78 a sq. yd; straight curb, 63 cts. a lin. ft.; circular curb, 94 cts. a lin. ft.; M. H. Dale, pavement, $1.795 a sq. yd.; straight curb, 64 cts. a lin. ft.; circular curb, 95 cts. a lin. ft. For constructing a sewer in Philo St., Providence Road and North Main Ave. Length about 3,700 lin ft. of brick sewer (size from 30 to 66 in.) and about 1,500 lin. ft. of 8, 12, 15 and 24-in. pipe. Average depth about 12 ft.: Donohoe & O'Boyle, complete, $21,700; A. H. Coon & Son, complete, $22,900. The bid includes the building of one outlet, 18 basins, 28 manholes and 150 house connections (about 2,480 lin. ft). Joseph T. Phillips, Cy. Engr.

PIPE SEWER.—Albany, N. Y.—P. H. Reilly has been awarded the following contract for building a pipe sewer in Trinity Place: 15-in. extra heavy vitrified pipe, 598 lin. ft., $1.60 a ft.; 6-in. pipe, 300 lin. ft., 10 cts.; 15-in. Y-branches, 30, $4.10 each; manholes, 2, $50 each; lamphole, $15; receiving basin, $70; trenches, 240 lin. ft. 30 cts.; 6-in. bends, 40, 50 cts. each, and reducers, 15, 75 cts. each.

ASPHALT PAVING.—Sandusky, O.—The following bids were received Feb. 15, 1899, for asphalt paving in Central Ave. and Jackson St.: Ayers' Asphalt Paving Co., Zanesville, O., 2-in. surface, $1.50; 1½-in. surface, 1-in. binder, $1.53; Warren-Scharf Asphalt Co., New York, 2-in. surface, $1.65; 1½-in. surface, 1-in. binder, $1.70; T. E. Cole, Toledo, O., 2-in. surface, $1.82; Alcatraz Construction Co., Detroit, Mich., 2-in. surface, $2.45; 1½-in. surface, $2.20. New Castle Asphalt Block.—A. G. O'Donnell, $1.89; C. F. Hartman, $1.91; M. J. Callan, $1.93; Geo. J. Doerzbach, $1.89½. The bids for new curb and resetting old curb were as follows: Alcatraz Construction Co., 38 cts. for new, 15 cts. for resetting; Warren-Scharf Co., 33 cts., 10 cts.; Ayers' Asphalt Co., 31 cts., 11 cts.; T. E Cole, 38 cts., 17 cts.; Geo. J. Dierzbach, 39 cts., 11 cts.; M. J. Callan, 38 cts., 12 cts.; A. G. O'Donnell, 31 cts., 10 cts.; C. F. Hartman, 33 cts., 15 cts.

PIPE SEWER.—Albany, N. Y.—The following contract was let last week to John Doyle for building a pipe sewer in Watervliet Ave.: 12-in. pipe, 544 lin. ft., $1.55 a ft.; 6-in. pipe, 484 lin ft., 15 cts.; Y-branches, 39, $3.50 each; manhole, $50; lamphole, $14; trenches, 484 ft., 50 cts.; 6-in. bends, 37, 50 cts.

LEVEE WORK.—Shreveport, La.—The Bossier Levee Board awarded the contract for building the Riverside levee (to be about 8,000 ft. long and over 10 ft. high) to Hunter Bros., of Shreveport, at 13.2 cts. a cu. yd.

COAL HOPPER, PIT, ETC.—Philadelphia, Pa.—The following bids were received Feb. 23 for constructing the coal hopper, pit and building on the south side of Pennsylvania Ave., west of 20th St., for the Pennsylvania Ave. subway and tunnel; all local bidders; the contract was let to S. B. Opdyke, Jr.:

Bids Received at Philadelphia, Pa., Feb. 23, 1899, for Constructing Coal Hopper, Pit and Building.

Quantities.		Stacey B. Opdyke, Jr., 1222 Belmont Ave.	Ryan & Kelley, 8 So. Broad St.	The McManus Constn Co., 41 So. 15th St.	E. D. Smith & Co., 24th& Penn. Ave.
Coal hopper, pit and building, complete		$3,318.00	$3,900.00	$4,570.00	$4,461.00
Reconstruction of stairways, etc., complete		650.00	500.00	900.00	850.00
Additional amount, complete in place:					
Rubble masonry	5 cu. yds.	7.50	5.50	5.00	6.50
Coping	10 cu. ft..	1.00	1.50	3.00	1.60
Pedestal stones	20 " "	1.00	1.50	2.00	1.20
Brick masonry in natural cem. mortar	5 cu. yds.	9.00	9.00	7.00	10.00
Concrete	5 " "	6.00	5.00	5.00	5.75
Steel work, painted and erected	1,000 lbs.	.03	.04	.036	.04½
White or yellow pine lumber	500 ft. B.M.	50.00	50.00	35.00	40.00
Granolithic wearing surface, 1-in.thick	5 sq. yds.	1.50	2.50	.60	1.50
Galvanized iron work	25 sq. ft..	.20	.10	.18	.10
6-in. terra cotta pipe	10 lin. ft..	.60	.25	3.00	.75
Additional excavation	10 cu. yds.	1.50	1.00	2.00	1.50
Dressing of existing retaining walls..	25 sq. ft..	.50	.50	.50	.25
Drilling holes in same, 1 to 2-in. diam	30 lin. ins.	.05	.15	.04	.05
Total		$4,213.00	$4,652.00	$5,749.70	$5,567.50
Time		3 mos.	4 mos.	2 mos.	4 mos.

PIPE SEWER.—Albany, N. Y.—We are informed that the following contract has been let to Michael F. Dollard for building a pipe sewer in Clinton Ave.: 20-in. extra heavy vitrified pipe, 10 lin. ft., $2.63 a lin. ft.; 18-in. extra heavy pipe, 75 lin. ft., $2.27; 12-in vitrified pipe, 1,250 lin. ft., $1.62; 6-in. pipe, 110 lin. ft., 13 cts. a ft.; 12-in. Y-branches, 56, $3.38 each; manholes, 2, $45 each; lamp-holes, 2, $12.50 each; trenches, 40 ft., 45 cts. a ft.; 6-in. bends, 100, 43 cts. each; reducers, 40, $1.26 each.

ENGINEERING MATERIAL PRICES

TRACK MATERIALS—
New York—Angle bars, 1.15 cts. to 1.20 cts.; spikes, 1.50 cts. to 1.55 cts.; track bolts, 1.75 cts. to 1.80 cts.
Chicago—Angle bars, 1.25 cts.; spikes, 1.55 cts. to 1.60 cts.; track bolts, hexagonal, 1.90 cts. to 2.00 cts.; square, 1.80 cts. to 1.90 cts.

RAILS, STEEL—
New York, new, $21.00 to $22.00
Chicago, new, $22.00 to $23.00; old iron, $14.00; steel, $8.00 to $10.00.
Pittsburg, new, $22.00 to $24.00; old iron, $14.25; old steel, $10.25 to $10.75.

STRUCTURAL STEEL—
New York—Beams, 1.45 cts. to 1.55 cts.; channels, 1.45 cts. to 1.55 cts.; tees, 1.50 cts. to 1.55 cts.; angles, 1.35 cts. to 1.40 cts.; rivets, 1.75 to 1.85 cts.
Chicago—Beams, 1.45 cts. to 1.60 cts.; channels, 1.45 cts. to 1.60 cts.; tees, 1.50 cts. to 1.60 cts.; angles, 1.35 cts. to 1.40 cts.
Pittsburg—Beams, 1.30 cts. to 1.40 cts.; channels, 1.30 cts. to 1.40 cts.; tees, 1.35 cts.; angles, 1.20 cts.; zees, 1.30 cts.

PLATES AND SHEETS—
New York—Universal mill plates, 1.60 cts.; tank, 1.70 cts. to 1.75 cts.; shell, 1.80 cts. to 1.90 cts.; flange, 1.90 cts. to 2.00 cts.; firebox, 2.25 cts. to 2.50 cts.
Chicago—Universal mill plates, 1.40 cts. to 1.50 cts.; tank, 1.45 cts. to 1.50 cts.; shell, 1.80 cts.; flange, 1.55 cts.; firebox, 2.00 cts. to 4.00 cts.; sheets, 2.25 cts. and upwards.
Pittsburg—Tank, 1.50 to 1.60 cts.; shell 1.70 to 1.75 cts.; flange, 1.60 cts. to 1.65 cts.; firebox, 2.00 cts. and upwards; sheets, 1.85 cts. to 1.95 cts.

MERCHANT STEEL—
Machinery per lb., 1.60 cts. to 1.70 cts.
Tool, per lb., 5.50 cts. to 7 cts.

IRON—
Pig iron:
New York—No. 1, $13.00 to $13.25; No. 2, $12.00 to $12.25.
Chicago—No. 1, $13.00 to $13.50; No. 2, $12.50 to $13.00.
Pittsburg—No. 1, $12.00 to $12.50; No. 2, $11.50 to $12.00.
Bar iron:
New York, common, 1.10 cts. to 1.15 cts.; refined, 1.15 cts. to 1.20 cts.
Sheets:
Common, American per lb., 2.15 cts. to 2.75 cts.
Russia, per lb., 10½ cts. to 11.00 cts.

LUMBER—
New York:
Hemlock timber, 20 ft. and under, per M, $12.00 to $12.50.
Piling. Eastern spruce, 35 to 40 ft., 30 to 40% 12-in. butts, 4.00 cts. to 4.25 cts.
Spruce, special cargoes, per M, $15.00 to $17.50.
Yellow pine, random cargoes, $15.50 to $17.00.
North Carolina pine, $2.25 to $2.40 advance over Norfolk rates.
San Francisco:
Oregon pine, per M, $15.50 to $17.50.
Redwood, per M, $18.20 to $20.00.
Redwood tank stock, up to 10 ft., $24.00 to $25.00.

GENERAL MATERIALS—
Lead, New York, 4.45 cts. to 4.50 cts.
Nails, Pittsburg, 1.40 cts.
Solder, per lb., 8¼ cts. to 13 cts.
Spelter, per lb., 5.25 cts. to 5.35 cts.
Copper ingots, 12.85 cts. to 13.00 cts.
Granite, rough, New York, cu. ft., 40 cts. to 50 cts.
Limestone, New York, cu. ft., 70 cts. to 80 cts.
Ohio freestone, New York, cu. ft., 85 cts. to 90 cts.
Slate, Penn., block, per square, $4.00 to $5.00.
White lead, American, per lb., 5¼ cts. to 6 cts.
Lime, common state, per bbl., 75 cts.

INDUSTRIAL NOTES.

THE CARNEGIE STEEL CO., Pittsburg, is reported to have received its first consignment of manganese iron ore from Santiago de Cuba, consisting of 950 tons.

THE ENGINEERING CONTRACT CO., and Sooysmith & Co., New York, have removed their offices from the Mills Bldg., 15 Broad St., to the Empire Bldg., 71 Broadway.

THE RICHMOND MACHINE & LOCOMOTIVE WORKS, Richmond, Va., is announced to have received a contract for 20 locomotives for the Swedish state railways.

THE AMERICAN ENGINE CO., Bound Brook, N. J., has opened an office at 97 Liberty St., New York, in charge of Mr. Edwin S. Boyer, formerly of Philadelphia.

THE ALPHA PORTLAND CEMENT CO. announces that the general offices have been removed to the works at Alpha, N. J., but all communications must be addressed to the company at Easton, Pa.

THE EDWARD P. ALLIS CO., Milwaukee, Wis., is reported to have received a contract from Laughlins & Co., Pittsburg, for four of the largest blowing engines ever erected, each engine to weigh 800,000 lbs.

THE ROANOKE MACHINE WORKS, Roanoke, Va., is said to be about to begin work on 1,000 freight cars of 100,000 lbs. capacity for the Norfolk & Western R. R. The steel frames will be made by the American Bridge Co.

THE BOARD OF TRADE of the Bethlehems (which include Bethlehem, South Bethlehem, West Bethlehem and Fountain Hill, Pa.), is offering inducements to manufacturers to establish industries in those places. Information as to advantages offered may be had by addressing the Secretary of the above Board, at South Bethlehem, Pa.

THE RITER-CONLEY MFG. CO., Pittsburg, is reported to have the contract to erect the new buildings for the steel car plant of the Pressed Steel Car Co., Pittsburg, to cost about $250,000. The six steel buildings will cover about 11 acres and will contain a large amount of heavy machinery, giving a capacity of 75 cars a day, it is stated.

F. L. SMIDTH & CO., 66 Maiden Lane, New York, have an order from the Empire Portland Cement Co., at Warners, N. Y., for the new installation of grinding machinery, and will supply their ball-mills and tube-mills. They have also a contract from the Georgian Bay Portland Cement Works, of Owen Sound, Ont., for grinding machinery consisting of ball-mills and tube-mills.

THE ODORLESS EXCAVATING CO., 64 Federal St., Boston, Mass., has lately received orders from Gen. Leonard Wood, at Santiago, and from Gen. Ludlow, at Havana, Cuba, also from United States government officers at San Juan, Porto Rico, for several complete outfits of its odorless excavating apparatus for each of these cities.

THE MURRAY IRON WORKS CO., Burlington, Ia., report the following orders on their books: Corliss engines—One 60-HP., one 150-HP., one 100-HP., one 400-HP., one 300-HP., one 200-HP. and one 50-HP. Boilers—Two 100-HP. high pressure, three 200-HP. internal-furnace, one 100-HP. internal-furnace, three 125-HP. high pressure, and three 100-HP. high pressure; also one 50-HP. portable, one 40-HP. portable, and one 30-HP. portable. Mining machinery—Two 50-HP. mine boilers and two mining engines. One yacht engine and boiler and one refrigerating machine.

THE GOODWIN CAR CO., 96 Fifth Ave., New York, has under construction a number of its 80,000-lb. steel, gravity, center and side dumping cars, equipped with hand and air dumping apparatus. They are leased to several of the large railways for handling coal, ore and broken stone. The cars are equipped with: Special 625-lb. machined wheels; hammered iron M. C. B. axles, with 5 × 9-in. M. C. B. journals; Ajax universal car bearings and radius spring side bearings; Sterlingworth brake beams and Corning flange brake shoes; Gould couplers and New York air brakes.

THE SNOW STEAM PUMP WORKS, Buffalo, N. Y., through its New York office, 126 Liberty St., has the contract for a 15,000,000-gallon triple expansion pumping engine, to be operated with 185 lbs. steam pressure, for the Calumet and Hecla Mines, Michigan. It will be tested under the rules exacted by Mr. E. D. Leavitt, Consulting Engineer, Boston, Mass. The 20,000,000-gallon triple expansion pumping engine built by the same company for the Indianapolis Water-Works, and tested by Prof. F. M. Goss, of Purdue University, is reported to have exceeded all former records of triple expansion tests.

NEW COMPANIES.—Brewster Granite Co., New York, N. Y.; $50,000; to conduct a quarrying business; C. E. Gregory, J. H. Weinberger, A. L. Schaeffer, S. B. Whiteside and W. G. Brown, all of New York.

STREET LIGHTING.

BINGHAMTON, N. Y.

Notice is hereby given that the city of Binghamton will receive, up to March 21, 1899, at 7:30 p. m., sealed proposals for furnishing, lighting and caring for street lamps within said city, under the following conditions:

Proposals must be sealed and addressed to S. D. Kane, city clerk, and be for one, two and three years' periods from June 1, 1899. Bids will be considered for either 200 or more naphtha lamps, with ordinary burner of twenty candle power; 125 or more naphtha, with common burner of twenty candle power; 75 or more naphtha with Welsbach burner of sixty candle power; 75 or more gas lamps with common burner of twenty candle power; 75 or more gas lamps with Welsbach burner of sixty candle power. The city will furnish and set all posts for naphtha lamps, and will also furnish seventy-five gas posts. All other posts for gas lamps are to be furnished by the contractor and all setting of gas lamp posts and all gas connections to be made by the contractor without expense to the city. The contractor will furnish and provide all other materials, including lamps, burners, naphtha, gas, films, and will light, keep clean and in good repair all lamps furnished. Lamps will be required to burn from dusk until daylight every night, with pro rata deductions for outrages. A certified check of $250 must accompany each bid, as a guaranty that the party, if awarded a contract, will enter into the same within ten days after official notice of the award.

A bond of $2,000, with sureties, to be approved by the mayor, must be given at the time of executing the contract, conditioned for the faithful performance of the contract and to protect the city from any claim for infringements of patents. All bills rendered in due form on the first of each month will be audited and paid, unless disputed, not later than the 15th of the same month. The city reserves the right to reject any or all bids.

By order of Common Council.
Dated February 21, 1899.

S. D. KANE,
City Clerk.

9-2t

WATER-WORKS.

BLOOMINGTON, IND.

The City Water-Works Company of Bloomington, Indiana, will receive sealed bids at its office up to noon, March 23, 1899, for the reconstruction and extension of its Water-Works System in and near said City, according to the plans and specifications adopted therefor, which may be seen at the office of the Secretary of said Company in the City of Bloomington, Indiana, or at the office of Frank Schefold, Engineer, New Albany, Indiana. The probable cost being about $25,000.00.

Each bid must be accompanied by a certified check of 3% of the amount of bid, made payable to the City Water-Works Company of Bloomington, Indiana, to be forfeited to the Company on failure to enter upon the contract upon the terms of his proposal, the right being reserved to reject any and all bids.

Full particulars will be given on application to the undersigned.

JAMES D. SHOWERS,
Secretary.

9-1t

PIPE SEWERS.

PONTIAC, MICH.

Sealed bids will be received up to 4 o'clock p. m. March 24, 1899, for the construction of 500 feet of 12-inch and 1,200 feet of 10-inch of main sewers. Plans and specifications can be seen at the City Engineer's office, Pontiac, Mich.

WM. J. FISHER,
City Engineer.

9-1t

SEWER SYSTEM.

LAURIUM, MICH., Feb. 21, 1899.

Sealed proposals for the construction of a system of sanitary and storm water sewers will be received by the Village Council, at the council rooms, until 8 o'clock p. m., of the 14th day of March, 1899, at which time they will be publicly opened and read.

The work will be let in one contract, and comprise approximately:

16,316 lin. ft. of 8-in. pipe sanitary sewer.
5,310 " " 10-in. " " "
1,820 " " 10-in. " catchbasin conns.
3,000 " " 12-in. " storm sewer.
300 " " 15-in. " " "
2,320 " " 18-in. " " "
280 " " 24-in. " " "
5,000 " " 3-in. " drain tile.
4,000 " " 2-in. " drain tile.
65 sanitary sewer manholes.
19 storm sewer manholes.
4 combined flushtanks and manholes.
34 catchbasins.
600 cubic yards of rock excavation.

All bids will be compared on the basis of this estimate, and the right is reserved to reject any or all bids.

A properly certified check, made payable, unconditionally, to the order of Joseph R. Murphy, Village Clerk, must accompany each bid, and be in an amount equal to five hundred ($500) dollars.

Proposals must be made upon blank forms furnished for that purpose, and all not in conformity with this notice will be considered as informal, and be rejected.

Plans and specifications are on file, and can be seen, and blank forms of proposals obtained, at the offices of the Village Clerk, and the Engineer, C. F. Loweth, 94 E. 4th St., St. Paul, Minn., and 301 W. 3d St., Davenport, Iowa.

By order of the Council.

JOSEPH R. MURPHY,
Village Clerk.

9-2t

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., February 25, 1899.—Sealed proposals will be received at this office until 2 o'clock p. m., on the 30th day of March, 1899, and then opened, for all the masonry work, roof covering, etc., for the U. S. Post Office, Court House, etc., building at San Francisco, Cal., in accordance with the drawings and specification, copies of which may be obtained at this office or at the office of the Superintendent at San Francisco, California. JAMES KNOX TAYLOR, Supervising Architect. 9-2t

U. S. ENGINEER OFFICE, Army Building, New York, Feb. 8, 1899.—Sealed proposals, in triplicate, for furnishing American Portland CEMENT at Forts Schuyler and Totten, N. Y., will be received here until 12 M., March 10, 1899, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 7-4t

U. S. ENGINEER OFFICE, 812 St. Paul St., Baltimore, Md., Feb. 8, 1899.—Proposals for furnishing and delivering at Hawkins Point, North Point, Rock Point and Fort Carroll, cement, stone, brick, iron beams and lumber will be received until noon, March 10, 1899, and then opened. For information apply to PETER C. HAINS, Col., Engrs. 7-4t

Contract Work Should Always be Advertised in a Paper Read by Contractors.

Nearly Every Prominent Contractor and Manufacturer of Contractors' Supplies in North America Reads Engineering News.